Congratulation on Child Health Nursing Research becoming a PubMed Central journal and reflections on its significance

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I was delighted to hear that Child Health Nursing Research (CHNR, ISSN: 2287-9110) became searchable in PubMed Central (PMC) on the morning of January 10, 2022. I have been consulting for CHNR since 2014 when Dr. Young Mee Ahn (Professor of Nursing, Inha University, Korea; 2014-2015) worked as the editor-in-chief. We discussed the production of full-text journal article tag suite extensible markup language (JATS XML) files, also called PMC XML files. I suggested a way to produce full-text JATS XML files for Korean-language articles. Starting with the second issue of volume 21 in 2015, full-text JATS XML files were made and uploaded to the journal homepage (https://www.e-chnr.org/). At that time, only a few publishing companies were able to produce full-text XML files of Korean-language articles. Since then, I have continued to have discussions with the editors-in-chief of CHNR, Dr. Won-Oak Oh (Professor of Nursing, Korea University, Korea; 2016-2017) and Dr. Hyun Young Koo (Professor of Nursing, Daegu Catholic University; Korea; 2018-2021) about ways to promote CHNR to the level of a top-tier nursing journal.

1. The History of CHNR’s Indexing in International Literature Databases

CHNR continued the Journal of Korean Academy of Child Health Nursing (ISSN 2233-4483) in 2013, which itself was a continuation of the Korean Journal of Child Health Nursing (ISSN: 1226-1815) in April 2006. Its title was changed to the present version in 2013 by the previous editor-in-chief, Dr. Kyung-Ah Kang (Professor of Nursing, Sahmyook University, Korea; 2010-2013) to be an international journal after removing “Korean” from its name. The title change was a starting point to promote the journal. On November 27, 2017, CHNR was included in the Scopus title list. However, on January 29, 2018, Scopus notified the journal that some documents from CHNR had been erroneously captured in Scopus, and it was recommended that the journal re-apply. Therefore, CHNR applied to Scopus on February 2, 2018. It was evaluated for inclusion in Scopus by the Content Selection & Advisory Board (CSAB) through a fast-track review. The CSAB advised that the title would be accepted for inclusion in Scopus on February 28, 2018. CHNR was also listed in the Directory of Open Access Journals on July 22, 2019, after applying on July 8, 2019. Its language was changed to English-only starting with the July issue in 2020. After continuing to produce English-only issues through April 2021, CHNR applied to PMC on May 15, 2021. CHNR passed the scientific evaluation by PMC on October 22, 2021; furthermore, it was released in PMC after reviewing the PMC XML file quality on January 9, 2022. I have collaborated with the editors during the application process to those international databases because I have some experience with these applications. Fortunately, the editors have always sincerely listened to me. On December 15, 2021, CHNR also applied to SCIE, which is managed by Clarivate. It is currently under review for inclusion in SCIE.

2. Significance of CHNR Becoming a PMC Journal

CHNR is the first nursing journal in Korea to become a PMC journal. Many biomedical journals from Korea are indexed in PMC. Out of 724 PMC journals without embargo published by societies or institutes, 127 (17.5%) were published in Korea as of June 1, 2021 [1]. Two nursing journals in Korea are indexed in MEDLINE, making them eligible to be listed in PMC. One is an English-only journal, Asian Nursing Research (ISSN: 1976-
1317), published by Elsevier since 2007, and the other is a Korean-language journal, the Journal of Korean Academy of Nursing (eISSN: 2093-758X). Both are official journals of the Korean Society of Nursing Science. However, the above two journals are not listed in PMC yet. Therefore, CHNR became a pioneer among nursing journals in Korea by becoming a PMC journal. If a journal is listed in PMC, its abstracts are transferred to PubMed automatically. Therefore, PMC journals are searchable in PubMed, the largest international biomedical literature database. Although CHNR has been an English-only journal since July 2020, the articles in Korean from three issues were also listed in PMC: volume 25, issue 2 (April 2019); volume 25, issue 4 (October 2019); and volume 26, issue 2 (April 2020) (Figure 1). This is also breaking news. In 2019, PMC announced that MEDLINE journals can be deposited in PMC regardless of the journal's language. Non-MEDLINE and non-English journals are also eligible to apply to PMC. This application requires two conditions: first, the primary content is largely in English, and second, at least 25 English articles have been published in recent years. The three issues of CHNR are the first examples of Korean-language articles listed in PMC. I am thrilled to find Korean in PMC. When I produced PMC XML in 2006 for biomedical journals in Korea, Korean-language journals could not apply to PMC, although it was possible to create PMC XML files. That was why I recommended colleague editors to change their journal language policy to English-only to apply to PMC in the late 2010s. Now, It is reasonable to recommend that other nursing journal editors publish at least half of each issue in English. Becoming a PMC journal and being searchable in PubMed will trigger the recruitment of manuscripts from researchers worldwide, although CHNR's regional scope is currently mainly Korea. After becoming a Scopus-indexed and English-only journal, unsolicited submissions were received from countries outside Korea, including Indonesia, Egypt, and Nepal [2-6]. After being listed in PMC and PubMed, this trend will be accelerated since these two databases are very well-known among nursing researchers. I also believe that submitters will be satisfied with the review and editorial quality of CHNR because its editors and reviewers care deeply about the submitted manuscripts and strive to the utmost extent to publish valuable articles. Furthermore, its reasonable article processing charges are not a burden that hinders authors from submitting articles. After being listed in PubMed and PMC, the citation frequency of local journals in Korea has generally accelerated, with even 10-fold increases [7]. Many local biomedical journals published by academic societies have been underestimated due to not being listed in PubMed. This lack of a well-known journal brand can be overcome by becoming a PMC journal. The same phenomenon may also happen to CHNR. Receiving more citations is critical for a journal to be accepted as an SCIE journal by Clarivate. Many local society journals have become SCIE journals after becoming PMC journals [1]. The best way for local journals to become top-tier journals without the help of large international publishing companies is to be listed in PMC and searchable in PubMed. Each article in PMC can compete with all other articles from all over the world according to its scientific quality and clinical significance without a journal brand bias. This is possible because PubMed and PMC are freely accessible platforms, unlike other famous international literature databases.

3. Suggestions for Further Promotion

The quality of society journal content mainly depends on society members’ research and writing competency. The following actions are recommended for journal promotion:

**First**, training younger members of the society who submit manuscripts to the journal is essential. The training courses may include writing journal articles from Ph.D. or MSc theses, research and publication ethics [8,9], reporting guidelines, study design, study size [10], statistical methods, style and format, English writing, and other relevant topics. Individual coaching by senior researchers is also efficient [11].

**Second**, recruiting high-quality articles from outside Korea is also suggested. When recruiting articles, special topics can be arranged by appointing a guest editor. In medical journals in Korea, review articles by foreign authors received more citations than articles of other types [12].

**Third**, the research location (country) and study design should be more consistently described in article titles. This may provide a mechanism for readers to select specific articles for their purposes.

**Fourth**, reporting guidelines have been well established for most types of articles. Therefore, to maintain the scientific quality, a description based on the reporting guideline for each study design should be strictly continued. It is desirable to cross-check the reporting guideline with the description of the study design in the main text.

**Fifth**, a data sharing policy is currently not mandatory. Data sharing is still not common among society journals from Korea [13]. Out of 58 society journals indexed in the 2019 Journal Citation Ranking, 12 (20.3%) announced data sharing and reproducibility policies [14]. Of 100 journals in Korea, 13 had already adopted a data sharing policy. The strength of the policy was recommendation-only in 10 of those 13 journals in January 2019 [15]. However, it is advised to share raw data after removing individual identification to promote reproducibility and scientific integrity. Although researchers can contact the corresponding authors to obtain raw data, those requests are sometimes unsuccessful.
Sixth, it is recommended to announce a preprint policy. Between December 11, 2020, and January 8, 2021, out of 383 SCI journals published by academic societies from Asia, 30 journals (7.8%), including 10 journals from Korea, had announced a preprint policy [16]. Of 365 editors or publishers in Korea, 230 (63.8%) agreed with the necessity of accepting preprints in journal publishing [17]. Although it is still not widespread in Korea, a preprint policy should be considered to provide guidance regarding whether to receive preprint submissions.

Out of many nursing journals in Korea, CHNR is a pioneer in changing the language of the main texts to English and being listed in PMC. I believe that the journal’s citation frequency will increase dramatically soon because the scientific integrity of the journal is excellent. The manually calculated 2021 impact factor of CHNR is $40/98=0.408$ (40 citations from 2021 Web of Science Core Collection articles to 2019-2020 articles of CHNR divided by 98 citable articles in CHNR in 2019-2020) as of January 11, 2022. I anticipate that this value will soar soon. I hope that CHNR will continue flourishing to promote the health of infants, children, adolescents, and their families in Korea and worldwide by providing research on evidence-based practices.

Authors’ contribution
All the work was done by Sun Huh.

Conflict of interest
Sun Huh has been a president of the Korean Council of Science Editors since January 2020 and a president of the Korean Association of Medical Journal Editors since April 2020. Child Health Nursing Research has been a member journal of these two organization. Otherwise, no existing or potential conflict of interest relevant to this article was reported.

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REFERENCES
1. Huh S. PubMed Central as a platform for the survival of open-access biomedical society journals published in Korea. Science


