Gender equity in medicine, artificial intelligence, and in this issue

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Sex difference in medicine

In a previous editorial [1], I stressed the *Ewha Medical Journal*'s gender equity policy. In this issue, the particular topic of the sex difference in medicine was organized by Dr. Na-Young Kim, a gastroenterologist at Seoul National University. She recruited one original or five review articles. Out of 6 articles, the Korean Sexual and gender minorities' Health by So et al. [2] is an outstanding review article on gender minorities' health —LGBTQIA+, encompassing lesbian, gay, bisexual, transgender, questioning, intersex, asexual individuals, and other diverse identities health. There was no such comprehensive article in the previous literature in Korea. Sexual and gender minority individuals (SGM) in Korea experienced numerous mental health challenges. This review indicated that they had high rates of depression and anxiety symptoms, as well as increased suicidal thoughts, planning, and attempts. Additionally, their perceived quality of life related to health was lower compared to others. Sexual minorities who faced discrimination or efforts to force them to change their sexual orientation or gender identity were at an even greater risk of developing mental health issues.

Choi et al.' study suggests that there were sex differences in the effects of obesity on the development of gastric cancer and there is a positive association between excess body weight and the risk of gastric cancer in Koreans, especially in highly obese males [3].

There were reviews on the sex differences in metabolic dysfunction-associated steatotic liver disease, sex differences in coronary atherogenesis, sex differences research in neuroscience, and sex bias in autism spectrum disorder using preclinical rodent models. All topics on the sex difference in medicine will be exciting for Korean and worldwide readers.

As for equity, diversity and inclusiveness of target population of medical research, sexual and gender minorities are usually primary concern. Another groups in Korea may be immigrants, disabled persons, and prisoners. I would like to deal with the topics on those groups continuously in the *Ewha Medical Journal*. .

Deep learning and generative artificial intelligence platform

Choi et al.'s article [4] on the accurate pediatric bone age prediction model using deep learning revealed that "the deep learning-based Korean model exhibited higher bone age prediction accuracy than conventional methods, a crucial advancement for accurate growth assessment and clinical decision-making." These results can be used in deep learning to estimate bone age.

Baik and Lee mentioned the role of artificial intelligence (AI) in general surgery [5]. Through an analysis of published research, they sought to elucidate the potential applications of artificial intelligence (AI) in general surgery. Their findings indicate that implementing AI in the preoperative stage is nearing feasibility, while its utilization within the operating room needs more study. They advocate for tailoring AI tools specifically for general surgery, accomplished through fostering interdisciplinary collaboration and drawing upon the lessons gleaned from AI success stories in other disciplines.

Since the AI is unavoidable tool in medical care and education, the submissions on AI use or development are welcomed.

Public health

Lee et al. [6] submitted a high-quality systematic review on exposure to air pollution and precocious puberty. They said that "majority of the studies suggest that exposure to air pollutants accelerates pubertal development; however, the results from the available studies are inconsistent." Dr. Eunhee Ha, the corresponding author of this systematic review, is a current Ewha Womans University College of Medicine

dean. She is an excellent researcher in environmental medicine worldwide. I am happy to publish her excellent research results.

Mr. Seokmin Lee, officer of the Statistics Research Institute, Statistics Korea, submitted drug-induced death statistics in Korea between 2011 and 2021 [7]. This comprehensive data has just been published. In 2021, Korea experienced a staggering 172.7% surge in drug-induced deaths compared to 2011, with the number arising from 205 to 559 cases. The rate of drug-induced deaths per 100,000 populations also increase dramatically by 153.6%, from 0.4 in 2011 to 1.1 in 2021. Although the magnitude of drug-induced deaths in Korea (1.1 per 100,000) remains relatively low compared to the that of United States (29.2 per 100,000), this cause of mortality has been on an alarming upward trend in recent years. Notably, drug-induced deaths disproportionately impact younger demographics, and a significant proportion involves intentional self-harm. It will be an essential source of research in this field. I anticipate more submissions by the officers of the Statistics Research Institute in the future.

In this issue, one of the most striking articles may be written by Lee et al. [8] in the Infectious Disease Research Center, Seoul Metropolitan Government, entitled "the influenza epidemic threshold different from those in the United States and Europe causes a Long epidemic period in Korea during the 2018-2019, 2019-2022, and 2022 –2023 seasons". The authors pointed out that "a low influenza epidemic threshold may have contributed to this long influenza epidemic period declared in 2022 and has continued until late 2023 in Korea" by comparing the seasonal influenza epidemic thresholds in Korea, the United States, and Europe. Those results may influence the Korean government's epidemic threshold, which is essential to predict and prevent the influenza epidemic.

It passed 7 months since I accepted the editor-in-chief's position by the Dean, Dr. Eunhee Ha, in September 2023. The first great challenge in publishing this institutional journal is the shortage of submissions. Therefore, I did my best to receive submissions from famous medical researchers in Korea. The April issue is the fourth issue of editing this journal. The number of articles reached a satisfactory level and were eligible for evaluation by the significant literature databases. As for the quality of the articles, I have strived to keep the minimum criteria of quality evaluation by those databases.

I appreciate the authors of this issue for submitting high-quality articles and case reports. I believe those papers will be exciting sources for medical researchers and graduate and undergraduate medical students.

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Authors' contributions

All work was done by Sun Huh.

Conflict of interest

Sun Huh has been the editor of the *Ewha Medical Journal* since September 2003. However, he was not involved in the peer review process or decision-making. Otherwise, no potential conflict of interest relevant to this article was reported.

Data availability

Not applicable.

Supplementary materials

Not applicable.

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