Over 40 years have passed since the Japanese government recognized the importance of gender equality and started taking measures to ensure gender equality. Gender equality is recognized as a common global problem, and every year the United Nations Development Program and the World Economic Forum publish international indices of gender equality, such as the Gender Inequality Index and Gender Gap Index (GGI). Japan received a relatively high rating for indicators focused on basic living standards, i.e., health and education, as indicated by average life expectancy, perinatal mortality rate, enrollment rate, and other parameters. However, with regard to the GGI, Japan ranked only 114th among 144 countries, indicating a certain degree of reluctance to decrease the gender gap. Looking at the evaluation breakdown by field, the low numbers of female legislators and female managers/executives lowered Japan’s ranking.

This trend is the same in the medical community. The proportion of women among Japanese doctors is 20.3%, which is the lowest among OECD member countries. The proportion of female doctors in Japan in 1970 was only 9.5%, and since then, the number of female doctors has increased and there is no doubt that the proportion is rising. However, the proportion of female doctors under the age of 35 years has remained constant at about 33% since 2010; thus, it is unlikely that the proportion of female doctors will increase steadily in the future. In the field of cardiology, the proportion of female doctors is much lower at slightly less than 20%. A similar trend is also observed in surgical departments. Moreover, the proportion of female doctors in leading positions is very low compared to that in other countries.

In the current issue of International Heart Journal, Fujii, et al., investigated the proportion of female authors as first authors of articles in English cardiovascular journals in Japan published between 2006 and 2015, and they analyzed the characteristics. The study found that the proportion of female authors increased from 13% to 20% between 2006 and 2009, which has reached a plateau in recent years. The percentage of 19% in the study is similar to the percentage of female members in the Japanese Circulation Society. Therefore, it can be reasonably concluded that in Japan female cardiovascular physicians are writing articles in English globally at a pace that is equivalent to those being written by male individuals who are at the same position. However, the current situation is not that simple.

The study also analyzed the affiliation of the author, the scale of the study, and the research field (clinical or basic), and it demonstrated associations between these factors and research productivity.

One of the results obtained was that the proportion of female authors decreased if the study was large and included many co-authors. The study also pointed out that the proportion of women as the corresponding author was low. Indeed, a limited number of authors might have mass produced papers and contributed to the current proportion of female authors as the first author, and it is possible that they successfully achieved career advancement and that they were selected as the lead author of studies of “big data.” However, a more natural inference would be that more female doctors than male doctors were removed, without managing large-scale research or taking a leadership position. In other words, the essence of the problem is the difficulties associated with female leadership in the Japanese community, which is not limited to medical research.

To understand the background of the current report, several aspects associated with the findings should be focused on. Interdisciplinary analysis should be attempted. For instance, one of the reasons for the low proportion of female physicians in surgical departments is considered to be the difficulties associated with surgery, such as the long working hours and irregular hours. However, the high proportion of women in obstetrics and gynecology (31% in 2013) does not necessarily support this hypothesis. Similarly, the proportion of female members in Japanese medical societies of other fields in internal medicine are about 7-10%, which are lower than the proportion in the Japanese Circulation Society (12.3%). This suggests that the reasons for the impediment to career improvement among female cardiovascular physicians are not merely...
Japanese female doctors often leave their jobs in their mid-thirties due to personal circumstances, such as marriage, childbirth, or the transfer of their husband to a different location. The percentage of these women returning to work is not high. It is said that a female doctor can achieve only 80% of the work performed by a male doctor in a lifetime. In other countries, including the United States and Sweden, the turnover rate is very low and has been estimated to be around 15-25%. Additionally, in the United States, there was a time when men could preferentially enter medical school, as in the case of Japan. However, what differs is that the career support program for female doctors was examined and implemented concurrently with the elimination of gender differences. Therefore, the problem of limited career progression might be the most significant factor for the decrease in the female ratio, which might be associated with the results of the above-mentioned study. And the main cause is not merely a lack of self-help efforts of female doctors. Comparison with the United States suggests that there is room for improvement in social support systems.

Integrating data associated with gender bias in medical research will provide a comprehensive foundation for gender equality, which will make the scientific society more productive beyond gender.

Disclosures

Conflicts of interest: The author declares there are no conflicts of interest.

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