# Factors Influencing Acceptance of the Chairperson Position at Annual Scientific Meetings of the Japanese Circulation Society

— A Questionnaire Survey in Chugoku District —

Noriko Fukue, MD, PhD; Mari Ishida, MD, PhD; Makiko Taniyama, MD, PhD; Natsuko Mukai-Yatagai, MD, PhD; Takahiro Sakamoto, MD, PhD; Tomoko Tamada, MD, PhD; Takeshi Suetomi, MD, PhD; Kazuaki Tanabe, MD, PhD; Yukiko Nakano, MD, PhD

**Background:** The Japanese Circulation Society survey revealed that Japanese female cardiologists exhibited a trend to refuse the chairperson position; however, the causal factors remain uncertain.

**Methods and Results:** We distributed a questionnaire survey among chairpersons of the Chugoku regional meeting in November 2022. The rate of chair acceptance at the annual meeting tended to increase as the chairperson's experience grew (first time chairing a meeting, 25.0%; 2–3 times, 33.3%; 4–5 times, 53.8%; ≥6 times, 70.0%; P=0.021).

**Conclusions:** Providing inexperienced members with the chance to perform the role of chairperson will lead to them accepting to chair annual meetings.

Key Words: Annual meeting; Chair acceptance; Diversity; Regional meeting; Session chair

he Japanese Circulation Society (JCS) is the largest society representing the field of cardiology in Japan, with 32,620 members as of March 2022. The mission of the JCS is as follows:

With a spirit of integrity and fraternity, the JCS promotes holistic medicine and advanced research for health and welfare of human beings. We develop human resources who will inherit this mission, and in collaboration with international communities, will pursue the sustainable development of the society.<sup>2</sup>

The JCS has made remarkable achievements in numerous areas of cardiology research, medical treatment, and human resource development. In addition to its role in research and medicine, the JCS also bears the responsibility of establishing a robust medical system, disseminating guidelines, fostering multidisciplinary human resources,

and fulfilling various social functions.<sup>3</sup> Diversity, equity and inclusion promote innovation in cardiology.<sup>4</sup> The JCS is also working on this. The Diversity Promotion Committee of the JCS has stated:

We will work not only to build up men and women but also to further diversity – in ages, occupations, country of origin, academic society involvement, etc. – to foster mutual understanding and progress.<sup>5</sup>

In Japan, the number of female cardiologists is still low, with women accounting for only 14% of doctor members in the JCS. Moreover, it is difficult to secure enough cardiologists not only in terms of women, but also younger people, both male and female, in general. The JCS–Josei Jyunkankii Consortium (JJC) subcommittee of the Diversity Promotion Committee has created a list of female and young chairperson candidates to promote the participation

Received January 30, 2023; revised manuscript received March 30, 2023; accepted April 17, 2023; J-STAGE Advance Publication released online May 12, 2023 Time for primary review: 20 days

Department of Cardiology, Medical Corporation Koutokukai Mitajiri Hospital, Hofu (N.F.); Department of Cardiovascular Physiology and Medicine, Graduate School of Biomedical and Health Sciences, Hiroshima University, Hiroshima (M.I.); Department of General Medicine, Tamano Division, Dentistry and Pharmaceutical Sciences, Graduate School of Medicine, Okayama University, Okayama (M.T.); Department of Cardiology, Faculty of Medicine, Tottori University, Yonago (N.M.-Y.); Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Suita (T. Sakamoto); Department of Cardiology, Kawasaki Medical School, Kurashiki (T.T.); Department of Medicine and Clinical Science, Yamaguchi University Graduate School of Medicine, Ube (T. Suetomi); Division of Cardiology, Faculty of Medicine, Shimane University, Izumo (K.T.); and Department of Cardiology, Hiroshima University, Hiroshima (Y.N.), Japan

K.T. is a member of Circulation Reports' Editorial Team.

Mailing address: Noriko Fukue, MD, PhD, Department of Cardiology, Medical Corporation Koutokukai Mitajiri Hospital, 3-27 Ochaya-cho, Hofu 747-819, Japan. email: nor46ygc@gmail.com

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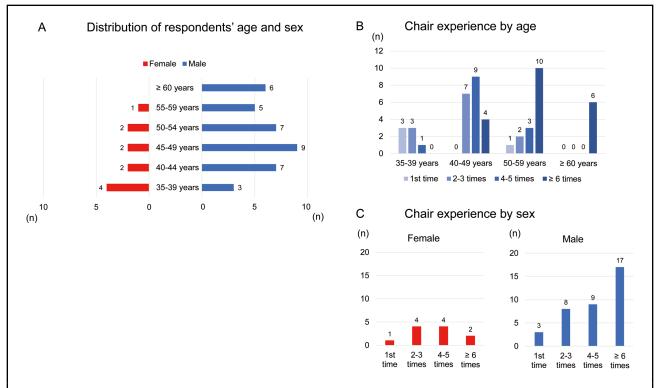


Figure 1. Background of respondents. (A) Distribution of respondents' age and sex. (B) Chair experience by age. (C) Chair experience by sex.

of female members and young members. The percentage of female chairpersons at the annual scientific meeting of the JCS rose to 25.2% in 2021, increasing from approximately 10% up to the 2020 annual meeting.8 However, when conference organizers asked female doctors on the list to chair annual scientific meetings of the JCS, some refused the request. The factors influencing the acceptance to chair annual scientific meetings of the JCS are not understood. A recent JCS survey revealed a trend wherein Japanese female cardiologists tended to refuse the chairperson position,8 suggesting potentially marked differences in the rate of accepting a chairperson based on sex. In addition, the acceptance rate for chairpersons may differ between annual and regional scientific meetings of the JCS due to differences in presentation topics, with the former mostly focused on research presentations requiring a deep understanding of the field and the latter mainly consisting of case reports that are more accessible to cardiologists primarily engaged in clinical practice. In addition, it is conceivable that the more experience an individual has as a chairperson, the higher their rate of agreeing to chair scientific meetings.

The JCS-JJC also produced a chairperson's manual in 2021 to support female members and young members. This manual was considered potentially useful for relatively young members and those who have less experience chairing meetings. If this chairperson's manual is evaluated as useful, the rate of accepting to chair scientific meetings may increase. Given the above, we conducted a survey targeting chairpersons of the Chugoku regional scientific meeting of the JCS to identify factors that may influence acceptance of the chairperson role at future annual and

regional scientific meetings, along with their recognition and evaluation of the chairperson manual.

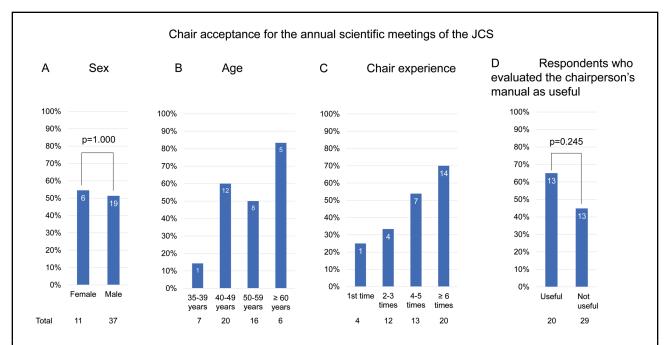
#### Methods

In November 2022, questionnaires were distributed to chairpersons of the Chugoku regional scientific meeting of the JCS, excluding corporate-sponsored sessions, to investigate the acceptance of the role of chairperson in future annual and regional meetings, as well as the recognition and evaluation of the chairperson's manual. With reference to previous research,8 the questionnaires included questions about sex, age, and the number of times the respondent had chaired academic conferences (hereafter referred to as "chair experience") to identify the factors associated with accepting the position of chairperson of annual scientific meetings of the JCS and with a positive evaluation of the chairperson's manual. Free comments on the JCS initiatives regarding positive chairperson recruitment of female doctors and young doctors were requested.

#### Statistical Analysis

The acceptance of the position of chairperson of annual meetings (hereafter referred to as "chair acceptance") was compared according to sex, age, chair experience, and evaluation of the manual using Fisher's exact test for categorical variables. Similar comparisons were performed regarding the usefulness or non-usefulness of the chairperson's manual. The differences among the 4 groups according to age and chair experience were evaluated using the Bonferroni test. The Cochrane-Armitage test was used to test the trend of the proportion. All statistical analyses

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**Figure 2.** Chair acceptance for the annual scientific meetings of the Japanese Circulation Society (JCS) according to (**A**) sex, (**B**) age, (**C**) chair experience, and (**D**) evaluation of the chairperson's manual. Chair acceptance for annual meetings was compared according to sex and evaluation of the manual using Fisher's exact test for categorical variables. Differences among the 4 age and chair experience groups were evaluated using the Bonferroni test. The Cochrane-Armitage test was used to test the trends in proportions.

were performed using EZR for R, which is a modified version of R commander designed to add statistical functions frequently used in biostatics. <sup>10</sup> P<0.05 was considered statistically significant.

## Results

At the Chugoku regional scientific meeting of the JCS in November 2022, no female doctors and only 1 young male doctor under 45 years of age refused the request to perform the role of chairperson according to the list made by the JCS-JJC. The questionnaires were distributed to 51 chairpersons, and 49 responses were received (response rate 96.1%).

#### **Background of Respondents**

Forty-nine doctors provided valid responses. Of these 49 doctors, 11 (22.4%) were female and 37 (75.6%) were male. Seven (14.3%) were aged 35–39 years, 9 (18.4%) were aged 40–44 years, 11 (22.4%) were aged 45–49 years, 10 (20.4%) were aged 50–54 years, 6 (12.2%) were aged 55–59 years, and 6 (12.2%) were aged  $\geq$ 60 years. The distribution of respondents' age and sex is shown in **Figure 1A**.

Chair experience was as follows: first time, n=4 (8.2%); 2–3 times, n=12 (24.5%); 4–5 times, n=13 (26.5%); and ≥6 times, n=20 (40.8%). Chair experience stratified by age and sex is shown in **Figure 1B**,C. Although it seemed that chair experience increased with age, there were a few respondents with less chair experience in age bracket 50–59 years.

# Chair Acceptance for Future Meetings and Evaluation of the Chairperson's Manual

Twenty-six (53.1%) respondents answered that they would

accept requests to chair annual scientific meetings of the JCS, of whom 3 (6.1%) indicated that they would only take on the role for the annual meetings and 23 (46.9%) responded that they would only accept requests to chair regional meetings. Forty-six (93.9%) respondents had known about the chairperson's manual of the JCS-JJC Consortium. Twenty respondents (40.8%) evaluated the manual as useful.

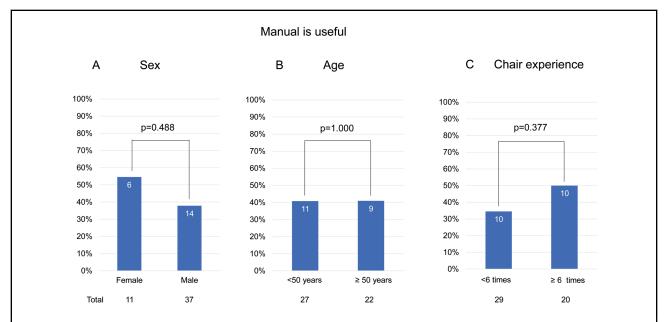
# Factors Related to Chair Acceptance for the Annual Scientific Meeting of the JCS

Chair acceptance for the annual scientific meetings of the JCS did not differ according to sex or whether the respondents regarded the manual as useful (**Figure 2A,D**). Although we evaluated for trends in the chair acceptance rate by age, no significant difference was observed for different age brackets (age 35–39 years, 14.3%; age 40–49 years, 60.0%; age 50–59 years, 50.0%, age  $\geq$ 60 years, 83.3%; P=0.057; **Figure 2B**). **Figure 2C** shows that the rate of chair acceptance tended to increase as chair experience increased (first time, 25.0%; 2–3 times, 33.3%; 4–5 times, 53.8%,  $\geq$ 6 times, 70.0%; P=0.021).

# Evaluation of the JCS-JJC Chairperson's Manual and Free Comments on JCS Initiatives to Recruit Female and Young Doctors as Chairpersons

The response that the manual was useful showed no significant differences according to sex, age <50 years, and chair experience ≥6 times (**Figure 3A–C**).

Fifteen respondents supplied free comments, which included "I think it's a good initiative, and we keep pushing forward with it" (9 comments); "I learned a lot and I am grateful for the opportunity" (3 comments); "Having a



**Figure 3.** (A) Sex, (B) age, and (C) chair experience of respondents who found the manual useful. The sex, age, and number of times the respondent had chaired a meeting were compared among respondents who indicated that the manual was "useful" using Fisher's exact test for categorical variables.

recommendation system might be a good idea too" (1 comment); "The English version of the chairperson's manual was also very useful" (1 comment); and "Female doctors should not be singled out and that younger doctors should be actively promoted" (2 comments).

# **Discussion**

We conducted a survey of chairpersons of the Chugoku regional scientific meeting of the JCS. This is the first report to discuss chair acceptance for the annual scientific meetings among chairpersons of regional meetings of the JCS. Half the respondents accepted the position of chairperson for the annual scientific meetings, and female doctors were no less accepting than male doctors. However, half the doctors did not accept requests to chair the annual scientific meetings of the JCS. One possible reason is that the chairpersons of annual meetings have to handle research topics and need to be well versed in highly specialized sessions, whereas there are many case reports at regional meetings. However, the chair acceptance rate increased as chair experience increased. Giving young doctors more opportunities to chair regional meetings of the JCS and meetings within their affiliations is considered important. Some time is required for doctors to gain the experience and confidence necessary to take on the position of chairperson for the annual scientific meetings of the JCS. Alternatively, a better approach may be to guarantee 2-person chairmanship, whereby inexperienced members are paired with a veteran who can help them fulfill the role.

The chairperson's manual by the JCS-JJC was well known. It was promoted on the JCS website, in an e-mail to JCS members, and on Twitter in 2021. The manual was evaluated as useful, regardless of sex, age, or experience. Although this manual encourages inexperienced members to take on the position of chairperson, it also seems to be

useful for some veterans. A respondent described that the English version of this manual was very useful, suggesting that using this tool may help promote acceptance of the role of chairperson in English sessions.

In the free comment section, comments about the active promotion of female doctors and young doctors were generally positive. Meanwhile, some respondents noted that female doctors should not be singled out and that younger doctors should be actively promoted. The quota system is a positive action that can be taken to allocate positions to minorities to correct disparities. Gender quotas have been introduced in political and economic fields all over the world. Moreover, some countries have applied it to the fields of science, technology, and academia.11 The quota system has also been actively introduced by academic societies and scientific journals. 12,13 In Japan, the advancement of women in science, technology, engineering, and mathematics is too slow.<sup>14</sup> The percentage of female researchers in Japan remains low (14.6%); in contrast, 20–40% of researchers are women in most OECD countries.<sup>14</sup> The benefits of using female doctors are too numerous to list. 15-18 However, as of December 2022, the ratio of female JCS doctor members was 13.5% throughout Japan and 12.6% in the Chugoku district. Female cardiologists remain in the 'underrepresented group', and firm gender quotas or policies that compel diversity are necessary. The effort to achieve this must be repeated every year. 12 Active promotion in the JCS is also expected to foster female mentors of cardiologists in Japan. For the development of the cardiovascular field, we must accelerate improvements in diversity, equity, and inclusion.

#### **Study Limitations**

The present study has some limitations. The survey targeted the chairpersons of the Chugoku regional meeting of the JCS, with a limited number of people. In this meeting,

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we had 2-person chairmanship, combining an inexperienced chairperson and a veteran chairperson. As a result, a larger proportion of the respondents had relatively more experience as a chairperson. Furthermore, the study may have been affected by regional specificity.

#### Conclusions

This survey shows that approximately half of those who accepted the position of chairperson at the Chugoku regional scientific meeting did not accept the position at the annual scientific meetings of the JCS. Chair acceptance did not differ by sex or age. The chair acceptance rate increased as chair experience increased. Giving chairmanship opportunities to inexperienced members is the key to bringing diversity to the annual scientific meetings of the JCS.

## **Acknowledgments**

The authors thank the Congress President of the 121st Chugoku Regional Meeting, Shiro Ono, for supporting this survey. The authors also appreciate the chairpersons who took part in the survey.

## **Sources of Funding**

None.

#### **Disclosures**

K.T. is a member of *Circulation Reports*' Editorial Team. The other authors report no conflicts of interest.

#### **IRB** Information

Respondents at the time of the survey were informed of the publication of the survey results, which were obtained with the consent of the individual. This protocol was approval by the Ethics Committee of Medical Corporation Koutokukai Mitajiri Hospital (Approval no. 590), and conformed to the provisions of the Declaration of Helsinki. The requirement for written informed consent was waived by the Ethics Committee because the study was based on a questionnaire survey.

### **Data Availability**

The data will not be shared, because they include personally identifiable information.

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