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Urological Notes

Japanese female urologists' work-life balance during the COVID-19 pandemic

Sachiyo Nishida,[1,2] Hitomi Sasaki,[1,3] Yoshiko Maeda,[1,4] Masayuki Koyama,[5,6] Katsuhito Miyazawa[1,7] and Naoya Masumori[1,2]

Abbreviations
COVID-19 = coronavirus disease 2019
JUA = Japanese Urological Association
WLB = work-life balance

[1]Diversity Promotion Committee, Japanese Urological Association (JUA), Japan, [2]Department of Urology, School of Medicine, Sapporo Medical University, Sapporo, Japan, [3]Department of Urology, School of Medicine, Fujita Health University, Toyoake, Japan, [4]Department of Urology, School of Medicine, Showa University, Tokyo, Japan, [5]Department of Public Health, School of Medicine, Sapporo Medical University, Sapporo, Japan, [6]Department of Cardiovascular, Renal and Metabolic Medicine, School of Medicine, Sapporo Medical University, Sapporo, Japan, and [7]Department of Urogenital Surgery, School of Medicine, Kanazawa Medical University, Ishikawa, Japan
masumori@sapmed.ac.jp

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The COVID-19 pandemic has significantly impacted physicians, including urologists. Therefore, the Diversity Promotion Committee of the Japanese Urological Association (JUA) decided to undertake a study on Japanese urologists' work-life balance (WLB) during the pandemic.

On May 25, 2020, when the state of emergency was lifted, an internet announcement was made to all 8510 members of the JUA, and an online survey was conducted. The data were collected over an 8-day period. The respondents' anonymity was maintained, and no personal information was included.

The JUA's Institutional Review Board and Ethics Committee deemed that the study did not require approval by a committee. This judgment was based on the Japanese Ministry of Education and Ministry of Health, Labor, and Welfare's laws and regulations.

The various determinants of WLB were explored, and multivariate linear regression analyses were conducted to investigate the various factors' relative contributions. $p < 0.05$ was considered significant. All statistical analyses were performed using JMP version 15.1.0 (SAS Institute Inc., Cary, NC, USA).

Of the 1048 members who responded (12.3% response rate), 931 were males, 111 were females, and 6 responders did not report their gender. Further, 254 (27.2%) male and 31 (27.9%) female urologists reported that their WLB had worsened. Contrastingly, 253 (27.1%) male and 54 (48.6%) female urologists reported that their WLB had improved. Logistic regression analysis was performed to determine the factors that worsened and improved WLB (Table 1). The results showed that four variables: a high job position (Director or head of the department), the presence of anxiety, an increased workload, and increased housework burden contributed to the deterioration in WLB ($p \leq 0.01$). Out of these four variables that contributed to the deterioration in WLB, three variables were negative variables that improved WLB, and the only significant positive variable that improved WLB was being female ($p < 0.01$).

Worldwide, the environment for women has been difficult during the COVID-19 pandemic.[1] Like other women, female physicians are equally responsible for the housework.[2,3] Despite this, the WLB has improved for female urologists. During the pandemic, regular medical services were restricted for various reasons. Therefore, urologists' working hours reduced because they were not directly treating COVID-19 patients. In Japan, approximately 60% of female physicians' partners are male physicians[4]; thus, the male partners returned home earlier and contributed to housework. This could have relieved female physicians a bit from the home burden and improved their WLB.

Another factor could be women's resilience. Whether there are gender differences in resilience to stress is a matter of debate. Epidemiological studies have consistently reported a higher prevalence of major depressive disorders under social stress among women, compared to men; however, greater trust in others had provided cover for women during the COVID-19 pandemic.[5] In our survey, of the urologists who answered that family burdens had increased, 20.0% and 41.6% of the males and females, respectively, had shared their plights with their colleagues. Contrastingly, 36.0% and 12.5% of males and females, respectively, responded that empathy was unnecessary. These differences in attitudes toward communication may have led to trust in their counterparts and improved female urologists' WLB. One of the reasons why promoting gender diversity is important is that it may help organizations embrace the resilience that women possess.

This study has certain limitations. The response rate for the study was low, due to the short survey period. Additionally, Japan has a large gender gap. Hence, the findings must be generalized with caution. The study focused on Japanese women who were socially and economically independent. Therefore, to provide a more holistic view, future studies can incorporate women from other sectors and backgrounds as well.

TABLE 1 Multivariate analysis of the factors contributing to deterioration and improvement in work-life balance

		Factors contributing to the deterioration (Deteriorated n = 288)				Factors contributing to the improvement (Improved n = 309)			
	n	Odds ratio	95% CI		p value	Odds ratio	95% CI		p value
Area (Infection spread area/Not)	645/403	1.14	0.82	1.57	0.44	0.76	0.57	1.03	0.07
Gender (Women/Men)[a]	111/931	1.3	0.77	2.19	0.33	2.13	1.37	3.29	<0.01
Specialty (Director or head of the department/ Others)	588/460	1.6	1.14	2.24	0.01	0.68	0.51	0.92	0.01
Work (Increased/Not increased)	181/867	7.14	4.86	10.47	<0.01	0.14	0.08	0.27	<0.01
COVID-19[b] (Yes/No)	354/694	1.27	0.91	1.75	0.16	1.05	0.78	1.44	0.73
Anxiety (Yes/No)	490/558	3.58	2.58	4.96	<0.01	0.5	0.37	0.67	<0.01
Discrimination[c] (Yes/No)	162/886	1.53	0.58	4.03	0.39	1.59	0.66	3.85	0.3
Housework (Increased/Not increased)	300/748	1.81	1.29	2.53	<0.01	0.94	0.68	1.3	0.72

aSix responders did not report their gender. Of the six, three and two selected worsened and improved WLB, respectively. bHave you treated/cared for patients with COVID-19? cDid you experience any discrimination or prejudice because you were a physician?

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AUTHOR CONTRIBUTIONS

Sachiyo Nishida: Conceptualization; data curation; investigation; writing – original draft. **Hitomi Sasaki:** Supervision. **Yoshiko Maeda:** Supervision; writing – review and editing. **Masayuki Koyama:** Data curation; formal analysis. **Katsuhito Miyazawa:** Methodology; supervision. **Naoya Masumori:** Project administration; supervision; writing – review and editing.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

APPROVAL OF THE RESEARCH PROTOCOL BY AN INSTITUTIONAL REVIEWER BOARD

N/A.

INFORMED CONSENT

N/A.

REGISTRY AND THE REGISTRATION NO. OF THE STUDY/TRIAL

N/A.

ANIMAL STUDIES

N/A.

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