

Research Survey on Socioeconomic Factors and Women's Health – Findings and Policy Recommendations

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1. Overview

With our sights set on generating recommendations regarding necessary and effective measures for establishing systems that will enable women to maintain physical, mental, and social health over the entire life course, that will empower women to be active in society in ways that fit their own aspirations, and that will contribute to socioeconomic development, Health and Global Policy Institute (HGPI) conducted a nationwide questionnaire survey of 10,000 people between the ages of 25 and 59 via the internet. Our findings showed that the symptoms of menstruation¹ and menopause can significantly impact women's social engagement and cause economic losses. There were also stark differences in how women utilize menstrual leave according to the size of the company they work for and their employment status, which suggests that broad-ranging measures which encompass labor policy will also be necessary. We also found that opportunities to obtain knowledge about women's health are extremely limited for both men and women, and that preventing health disparities from taking root and reproducing will require learning opportunities to be provided throughout the life course, including during school education and workplace training programs.

Notable survey findings

Difficulties caused by the symptoms of menstruation and menopause and the psychological and social barriers to seeking medical consultations.

- **81.2% of women who responded to the survey (N=4,950) felt that the symptoms of menstruation and menopause impact their everyday activities in various ways.**
- **Among female respondents, 5.3% have regular examinations from OB-GYNs or other health professionals. Also, 11.3% of women's respondents refrained from seeking medical attention due to time constraints or the belief that "Menstrual pain is just something you put up with" despite feeling that people require medical examinations or treatment when experiencing poor physical conditions due to the symptoms of menstruation and menopause.**
- **While 16% of women's respondents said they are currently seeing an OB-GYN, 26% of respondents said they want to see an OB-GYN in the future. Furthermore, the more reluctance people had toward medical examinations, the more likely they were to say that they want to learn about prevention and symptoms that require examinations or treatment.**

The impact of symptoms associated with menstruation and menopause on work and the economy (labor productivity losses)

- **When converting the survey results to Japan as a whole, the total annual cost of productivity losses due to symptoms associated with menstruation and menopause (absenteeism²) is approximately 362.8 billion yen.**
- **Among female respondents in the workforce(N=3,324), 79.6% felt these symptoms affect their productivity at work. The average cost of the productivity lost was 1,024 yen per hour. Among**

¹ In this proposal, the "symptoms of menstruation" encompasses the unpleasant symptoms experienced before and during menstruation, including premenstrual syndrome (PMS) and dysmenorrhea.

² Absenteeism is the fact of being away from work or school due to some reasons

respondents with full-time employment, losses due to inability to attend work were particularly large.

- Higher levels of abstinence from medical examinations corresponded to more days of work missed and greater labor productivity losses.

Disparities among companies, industries, occupations, and difference in perceptions between sexes

- Respondents working at companies with fewer employees were more likely to report that they do not have menstrual leave systems, and few employees actually make use of such systems.
- While there was no regional disparity in menstrual leave availability among employers, there was a significant gap in the availability of such systems between full-time employees and people with other terms of employment.
- Even when companies did offer menstrual leave, the percentage of respondents who actually took leave differed according to whether the leave was paid or unpaid.
- There was a difference in awareness toward menstrual leave between those in management and general employees. While 48.2% of respondents in management positions reported they are having menstrual leave systems, this number fell to 21.9% and 17.2% of respondents who were general staff (particularly those performing on-site labor, such as at factories) or in retail or service roles, respectively.

The effects of parents' perceptions on behaviors taken to address women's health-related issues

- Stronger tendencies for respondents' parents' to express attitudes toward menstruation like "Menstrual pain is just something you put up with" or "Taking low dose estrogen progestin (LEP) pills is embarrassing" corresponded to more experiences of abstaining from medical examinations.
- When respondents were asked how frequently they used over-the-counter (OTC) medicines, those who had previously said their parents viewed menstrual pain as "just something you put up with" were more likely to use OTC medicines, and more of them used OTC medicines as an alternative to seeking medical consultations for menstrual pain.

Educational opportunities and understanding toward women's health

- Respondents said they had limited opportunities to learn about women's health in the workplace, such as through training programs. About 20% of those serving in management roles and in the agriculture, forestry, and fisheries industry and about 10% of those in other occupations reported having such opportunities, which was few overall.
- Among all respondents, 24.7% said they had opportunities to acquire knowledge regarding women's health during school education.
- Many male respondents said that women's health issues are a topic they "Do not know about." Many female respondents perceived women's health issues in a different manner, saying "I do not think there is understanding (toward women's health issues) at my workplace."
- The more opportunities respondents had to learn about women's health at school or in workplace training programs, the more likely they were to respond that they think it is fair for women to receive menstrual leave when considering the differences between sexes.

- **The stronger respondents felt that women’s health was well-understood in their workplace, the more likely they were to report there was actual use of menstrual leave. Among those working at companies with 300 employees or less, many respondents felt that menstrual leave is unfair.**

Four recommendations on future actions based on the findings of this survey

Recommendation 1: Recognize that initiatives for women’s health are not only important from the perspective of improving sexual and reproductive health and rights for women, but they are also vital from the perspective of reducing socioeconomic losses.

Recommendation 2: In view of the fact that many women are still suffering from dysmenorrhea or menopausal symptoms and refrain from seeking medical attention despite major struggles due to those conditions, advance initiatives centered around primary care and family obstetrics and gynecology to help women receive primary care from physicians.

Recommendation 3: Correct disparities among companies, industries, and occupations as well as difference in perceptions between men and women.

Recommendation 4: Create opportunities for comprehensive sex education during school and provide guardians with opportunities to refresh their education on such subjects through parents’ classes and workplace training programs.

2. The background and objectives of this survey

Since the Abe administration announced that unlocking the potential of women is a key item for reinforcing the active engagement of human resources in 2014, a number of efforts have been made for that objective.³ The Act on the Promotion of Women's Active Engagement in Professional Life came into effect in 2016 and obligates the national Government, local governments, and private companies to take a number of actions in line with this objective. These actions include monitoring circumstances surrounding the active engagement of women, analyzing challenges, setting numerical targets, and formulating and publicizing action plans. That Act was revised in 2019 to expand the degree to which employers with 101 or more employees must implement such initiatives.⁴ Then, in 2022, the Government of Japan presented the “Basic Policy on Gender Equality and the Empowerment of Women 2022”⁵ which outlines various goals and implementation targets for (1) economic independence for women; (2) making society a place women can live with dignity and pride; (3) the active engagement of men at homes and in communities; and (4) achieving targets for the professional advancement of women. Various measures in line with this Basic Policy are now being implemented across ministries and agencies including the Ministry of Health, Labour and Welfare (MHLW); the Ministry of Economy, Trade and Industry (METI); the Ministry of Education, Culture, Sports, Science and Technology (MEXT); and the Gender Equality Bureau of the Cabinet Office.

³ Reinforcing the Active Engagement of Human Resources – Creating a Society in Which Women Shine! Prime Minister’s Office of Japan (kantei.go.jp)

⁴ Regarding the enactment of the Act on the Promotion of Women's Active Engagement in Professional Life (Japanese) [000962286.pdf \(mhlw.go.jp\)](#)

⁵ The Intensive Policy for Gender Equality and the Empowerment of Women 2022 (Basic Policy on Gender Equality and the Empowerment of Women 2022) (Japanese) [jyuten2022_honbun.pdf \(gender.go.jp\)](#)

Despite the many efforts being made to improve women's health, it is hard to say that those efforts are sufficient. This may be due to factors such as (1) the prevailing belief that issues related to women's health are issues for women to address, but not issues for society as a whole; and (2) there is a social attitude that women-specific health concerns like menstruation and menopause are life events that "Everyone experiences and therefore should be tolerated."⁶ In recent years, there has also been growing attention placed on the relationship between a person's socioeconomic status and their degree of health, the factors of which are called "social determinants of health" (SDH).⁷ While we require measures that take into account how these factors impact women's health, there has not been sufficient verification of the relationship between SDH and women's health in Japan. In March 2022, HGPI conducted a survey titled "The Public Opinion Survey on Child-Rearing in Modern Japan"⁸ which revealed that both men and women lack sufficient literacy on women's health and that SDH have a significant impact on pregnancy and childbirth. For example, 79.0% of men and 61.9% of women said they lacked knowledge about women's health and reproductive health and rights. With regards to socioeconomic status, men who were full-time employees were significantly more likely to have children than other men (93.2% of men with full-time employment had children compared to 76.8% of men in other forms of employment), while women were significantly more likely to have children if they were not full-time employees (43.5% of women with full-time employment had children compared to 56.6% of women in other forms of employment). Based on our recognition that it will be necessary to examine the relationship between SDH and women's health in a more comprehensive manner in order to leverage these perspectives in policy making, HGPI conducted a survey focusing on the following three points.

- 1) To quantitatively evaluate the economic impact of women's health issues based on our recognition that issues related to women's health do not only impact women but are also deeply related to society and the economy in broader terms.
- 2) To grasp current circumstances surrounding the relationship between SDH and women's health issues.
- 3) To verify the impact of prevailing social attitudes that lie beneath the challenges facing women's health, particularly the influence of parents.

The objective of this proposal is to utilize findings from the survey to provide recommendations regarding necessary and effective measures for establishing systems that will enable women to maintain physical, mental, and social health over the entire life course, that will empower women to be active in society in ways that fit their own aspirations, and that will contribute to socioeconomic development. Please note that due to limited space, details regarding the methodology used to conduct the survey are provided in the final section of this report.

⁶ Chen C.X., Draucker C.B., Carpenter J.S. What women say about their dysmenorrhea: A qualitative thematic analysis. BMC Womens Health. 2018;18:47. doi: 10.1186/s12905-018-0538-8.

⁷ Health and Labour Sciences Research Grant Research Program on the Challenges of Global Health Issues, Study on Social Determinants of Health FY2013 Research Report [Appendix 3 \(umin.jp\)](#) Chen C.X., Draucker C.B., Carpenter J.S. What women say about their dysmenorrhea: A qualitative thematic analysis. BMC Womens Health. 2018;18:47. doi: 10.1186/s12905-018-0538-8.

⁸ The Public Opinion Survey on Child-Rearing in Modern Japan <https://hgpi.org/en/research/wh-survey-2021-1.html>

3. Survey findings

3.1. Respondent attributes

All respondents: 10,000 men and women (5,050 men and 4,950 women)

Respondents who are employed: 7,758 men and women total (4,434 men and 3,324 women)

The following results are based on the respondent's demographics: N=10,000 (all respondents), N=4,950 (all women among respondents), N=7,758 (men and women among respondents who are currently working), N=3,342 (women among respondents who are currently working). Note that the respondent population differs depending on the survey item.

Figure 1: Respondent attributes (biological sex)

(September 2022, N=10000)

Biological sex		Age	
• Female	49.5%	• 25 to 29	10.8%
• Male	50.5%	• 30 to 34	10.4%
		• 35 to 39	14.8%
		• 40 to 44	13.7%
		• 45 to 49	19.8%
		• 50 to 54	15.8%
		• 55 to 59	14.8%

Source: Health and Global Policy Institute (2022)

Figure 2: Respondent attributes (area of residence)

(September 2022, N=10000)

Area of residence (region)		Area of residence (municipal status)	
• Hokkaido	4.1%	• Tokyo (within 23 wards)	9.2%
• Tohoku	6.5%	• Tokyo (outside 23 wards)	3.7%
• North Kanto, Koshin	7.4%	• Prefectural capital	30.7%
• South Kanto	31.5%	• City other than prefectural capital	46.2%
• Hokuriku	3.9%	• Town or village	10.2%
• Tokai	11.8%		
• Kinki	16.1%		
• Chugoku	5.4%		
• Shikoku	2.7%		
• Kyushu, Okinawa	10.7%		

Source: Health and Global Policy Institute (2022)

Figure 3: Respondent attributes (educational background, marriage status)

(September 2022, N=10000)

Educational background		Marriage status	
• Middle school	2.9%	• Has history of marriage	58.9%
• High school	27.9%	• Has no history of marriage	41.1%
• Vocational high school	2.4%		
• Technical college	13.1%		
• Junior college	9.1%		
• University	39.2%		
• Graduate school	5.0%		
• Other	0.1%		

Source: Health and Global Policy Institute (2022)

Figure 4: Respondent attributes (employment status, occupation, size of workplace)

(September 2022, N=10000)

Employment status		Occupation (N=7758)	Workplace size (employees) (N=7758)
• Full-time employee	48.3%	• Agriculture, forestry, and fisheries	0.9%
• Part-time	16.0%	• Trade worker or laborer	14.7%
• Contract/dispatch employee	6.8%	• Service and sales	24.2%
• Self-employed	6.5%	• Office/administrative support	28.5%
• Unemployed/Homemaker	22.2%	• Professional	20.2%
• Student	0.3%	• Management	9.7%
		• Self-employed	1.8%
		• 1 to 9	16.8%
		• 10 to 29	11.5%
		• 30 to 99	16.6%
		• 100 to 299	14.9%
		• 300 to 999	12.9%
		• 1000 or more	23.2%
		• Gov. office	4.1%

Source: Health and Global Policy Institute (2022)

Figure 5: Respondent attributes (household income)

(September 2022, N=10000)

Household income			
• None	2.0%	• 5 million to under 6 million yen	9.0%
• Under 1 million yen	2.7%	• 6 million to under 7 million yen	6.7%
• 1 million to under 2 million yen	4.0%	• 7 million to under 8 million yen	6.3%
• 2 million to under 3 million yen	7.0%	• 8 million to under 9 million yen	4.9%
• 3 million to under 4 million yen	9.4%	• 9 million to under 10 million yen	4.8%
• 4 million to under 5 million yen	8.8%	• 10 million yen or more	11.2%
		• Unsure/Declined to answer	23.2%

Source: Health and Global Policy Institute (2022)

3.2. Difficulties caused by the symptoms of menstruation and menopause and the psychological and social barriers to seeking medical consultations

■ The symptoms of menstruation and menopause have various effects on everyday activities

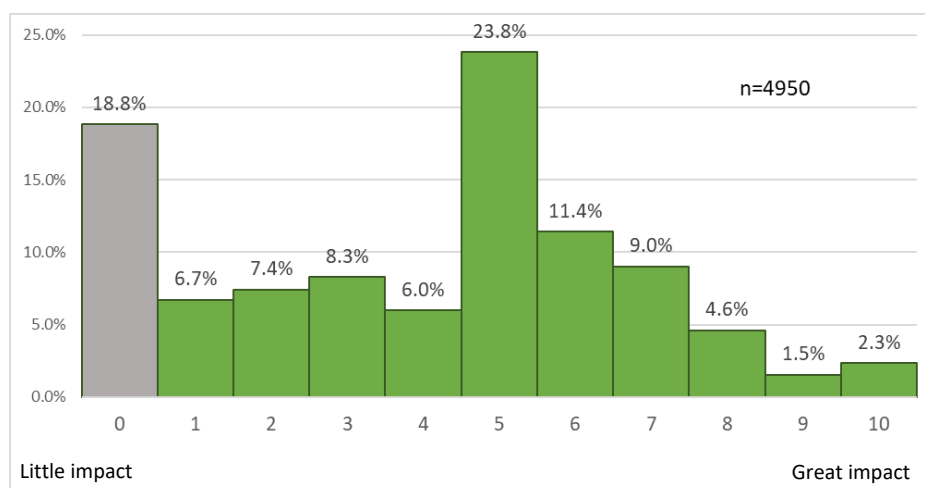
- ✓ Over 80% of female respondents felt that the symptoms of menstruation and menopause impact their everyday activities in various ways (figure 6).

■ Few people get regular medical examinations, but there was high demand for consultations and knowledge

- ✓ Only 5.4% of all respondents said they receive regular medical examinations due to the symptoms of menstruation and menopause, while 11.3% of respondents had experience refraining from doing so⁹ (Figure 7).
- ✓ Respondents who had avoided seeking medical examinations were more likely to think that menstrual pain is something to be endured (non-abstaining group, 27.4%; abstaining group, 44.6%) and to feel resistant to the idea of visiting a health facility (non-abstaining group, 24.9%; abstaining group, 41.8%) (Figure 7).
- ✓ Respondents who abstained from seeking medical examinations felt more resistant to the idea of visiting a health facility, but had the stronger desire to learn about prevention, treatment methods, and symptoms that require medical attention (non-abstaining group, 47.4%; abstaining group, 64.2%) (Figure 8).
- ✓ When asked about people to consult on the symptoms of menstruation and menopause, most respondents selected "Family member or partner." While 16% of respondents said they currently see an OB-GYN, 26% of respondents said they would like to see an OB-GYN (Figure 9).

Figure 6. The impact of the symptoms of menstruation and menopause on their daily life

(2022年9月 N=4950)



Source: Health and Global Policy Institute (2022)

⁹ Regular medical examination refers to the respondents who answered at least once or more to the question "How many times a year, on average, do you visit the hospital mainly for health problems caused by menstrual symptoms or menopausal symptoms?"

The experience refrain from seeking medical care refers to the respondents those who answered "Yes" to the question, "In the past 12 months, have you ever reduced the amount of medication you take or missed a visit to the hospital because of health problems caused by menstrual symptoms or menopausal symptoms, even though you felt it was necessary?"

Figure 7: Proportion of respondents who regularly make one or more annual visits to health institutions

(September 2022, N=3324)

Employment status	Makes visits	Refrains ¹
Full-time	5.7%	12.9%
Dispatch, etc.	4.5%	10.5%
Part-time	5.1%	9.3%
Self-employed	6.5%	13.7%
Unemployed/Homemaker	6.6%	12.2%
Overall	5.4%	11.3%

¹ Respondents who said they “reduced” or “somewhat reduced” visits to health institutions or the amount of medication they take within the past 12 months.

Source: Health and Global Policy Institute (2022)

Figure 8: Awareness toward women’s health issues and productivity losses by history of refraining from medical examinations

(September 2022, N=3324)

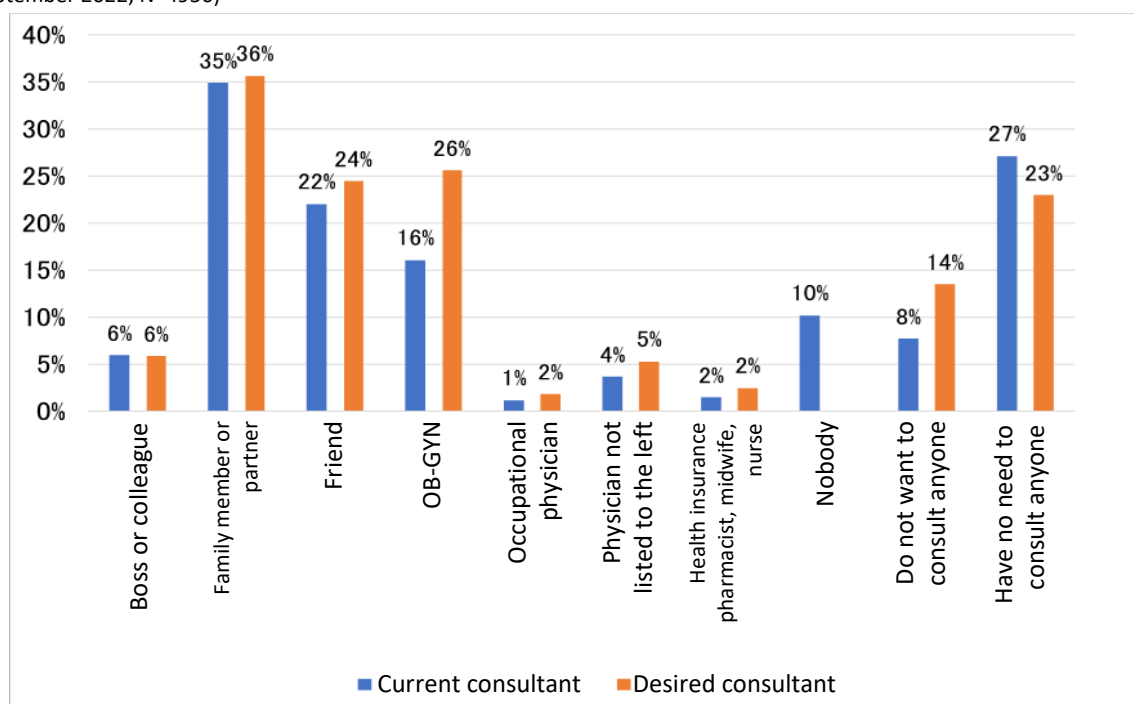
	No history of refraining	History of refraining
Has history of absence, late arrival, or early departure, or lowered productivity ¹	77.9%	95.7%
Feels that menstrual pain is just something you put up with	27.4%	44.6%
Feels hesitant toward seeing an OB-GYN to treat menstrual symptoms	24.9%	41.8%
Wants to learn about prevention and symptoms that require examinations or treatment	47.4%	64.2%

¹ Proportions represent those who responded “Agree” and “Somewhat agree”

Source: Health and Global Policy Institute (2022)

Figure 9: People to consult on the symptoms of menstruation and menopause and desirable consultants

(September 2022, N=4950)



Source: Health and Global Policy Institute (2022)

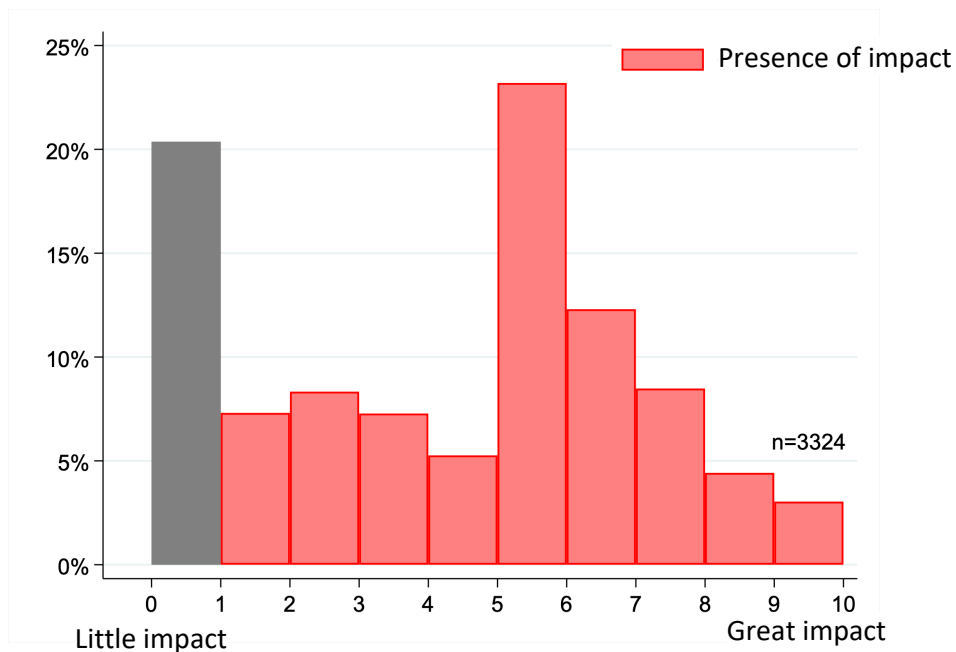
3.3. The impact of symptoms associated with menstruation and menopause on work and the economy (labor productivity losses)

■ The symptoms of menstruation and menopause hinder performance at work

- ✓ Approximately 80% of the working women who responded to the survey have experienced times when the symptoms of menstruation and menopause affected their productivity at work (Figure 10).
- ✓ When asked if they had missed or been late to work due to the symptoms of menstruation and menopause, 7.2% to 9.4% reported that they had such experiences within the past three months (Figure 11).
- ✓ The average number of days of work missed ranged from 2.7 days to 4.2 days per three months, while the average number of reduced working hours due to arriving late or leaving early ranged from 4.8 hours to 9.4 hours per three months (Figure 11).

Figure 10: The impact of the symptoms of menstruation and menopause on productivity at work

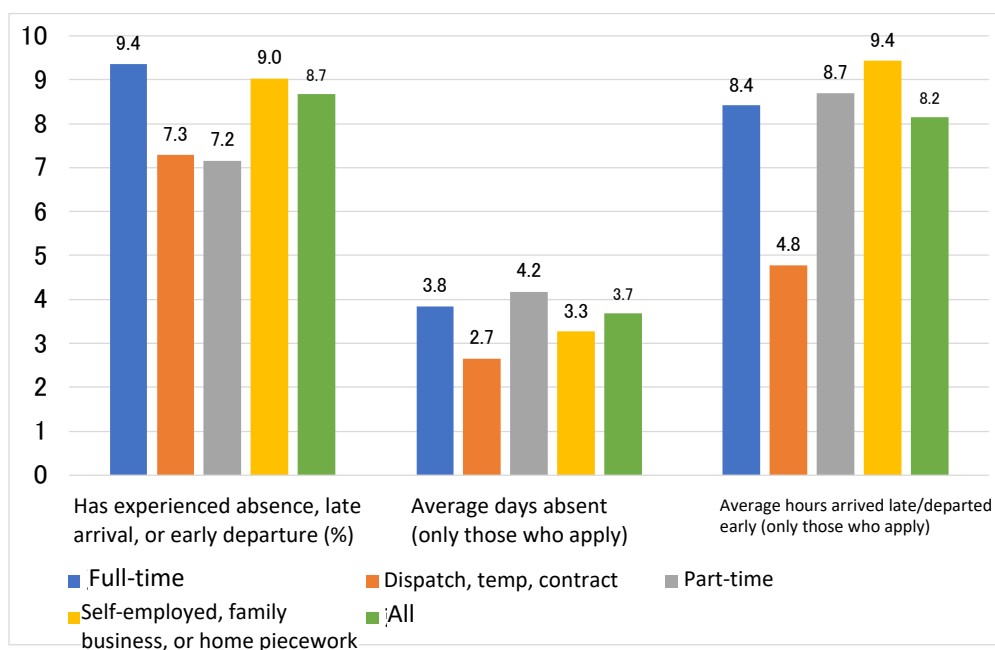
(September 2022, N=3324)



Source: Health and Global Policy Institute (2022)

Figure 11: Shortening of working hours due to absence, late arrival, or early departure (over the last 3 months)

(September 2022, N=3324)



Source: Health and Global Policy Institute (2022)

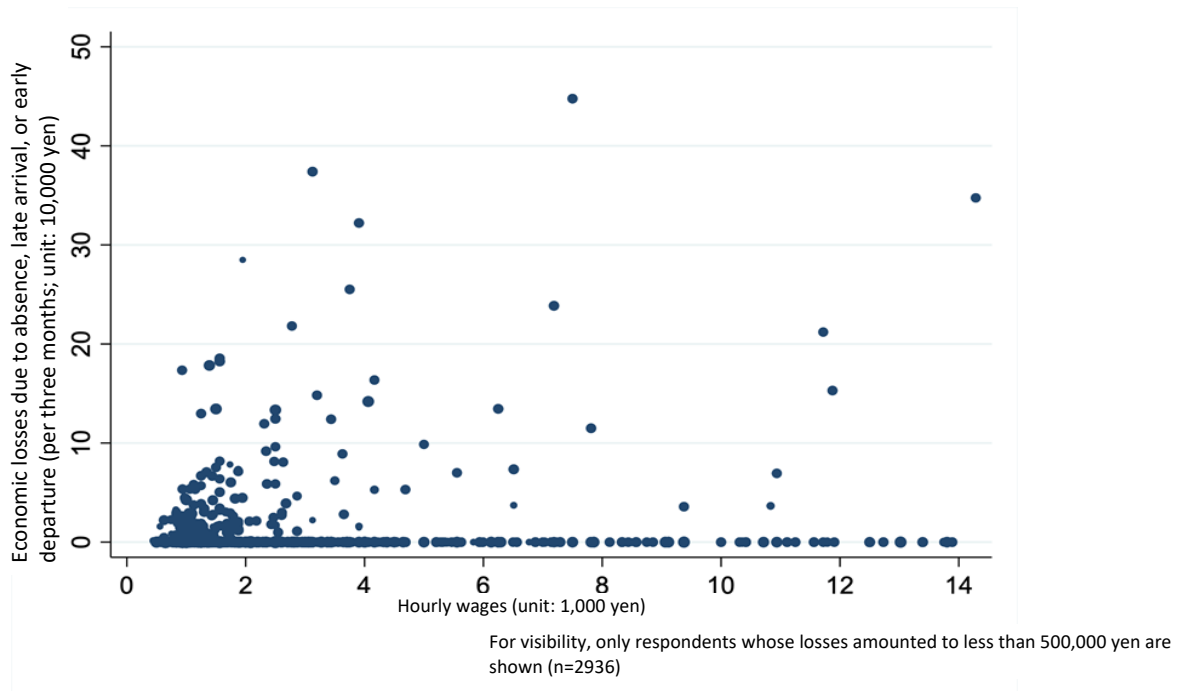
- **The total annual cost of productivity losses due to symptoms of menstruation and menopause is approximately 362.8 billion yen.**
 - ✓ Overall, the total cost of absenteeism was approximately 14.58 million yen per three months. Annually, this amounts to approximately 58.3 million yen, which equates to an annual loss of approximately 362.8 billion yen for all of Japan (Figure 14). (Calculation of Absenteeism¹⁰: $\Sigma[\text{Number of hours of tardiness, leaving work early, and absence}] \times [\text{Wage per hour}] / \text{Number of employees experiencing tardiness}$).
 - ✓ The annual loss of 362.8 billion yen is only due to absenteeism and does not include losses due to presenteeism¹¹. Therefore, the actual economic losses caused by various women's health-related issues may be higher than this figure.
 - ✓ Productivity losses that occur when people are experiencing the symptoms of menstruation and menopause(presenteeism) result in average losses of 1024 yen per hour (Figure 15).(Presenteeism calculation method: $\Sigma[\text{Degree of productivity loss}] \times [\text{Wages per hour}] / \text{Number of workers experiencing productivity loss}$)
- **Economic losses are greater among people with full-time employment**
 - ✓ Amounts lost per person for absences (absenteeism) are particularly high among people with full-time employment (approximately 106,000 yen per person per three months). (Figure 14)
 - ✓ The reasons for the differences between regular and non-regular employees are not clear from this survey, but may reflect differences in base salaries. Other types of employment (other than full-time employment) also incurred losses due to absenteeism, with an average loss of 66,000 yen per worker per 3 months. (Figure 14)

¹⁰ Absenteeism: When someone does not attend work due to health issues (also called sick leave)

¹¹ Presenteeism: When someone attends work while experiencing a disease or symptoms that lower their ability to perform their duties or that hinder their productivity.

Figure 12: Economic losses due to absence, late arrival, or early departure (Absenteeism)

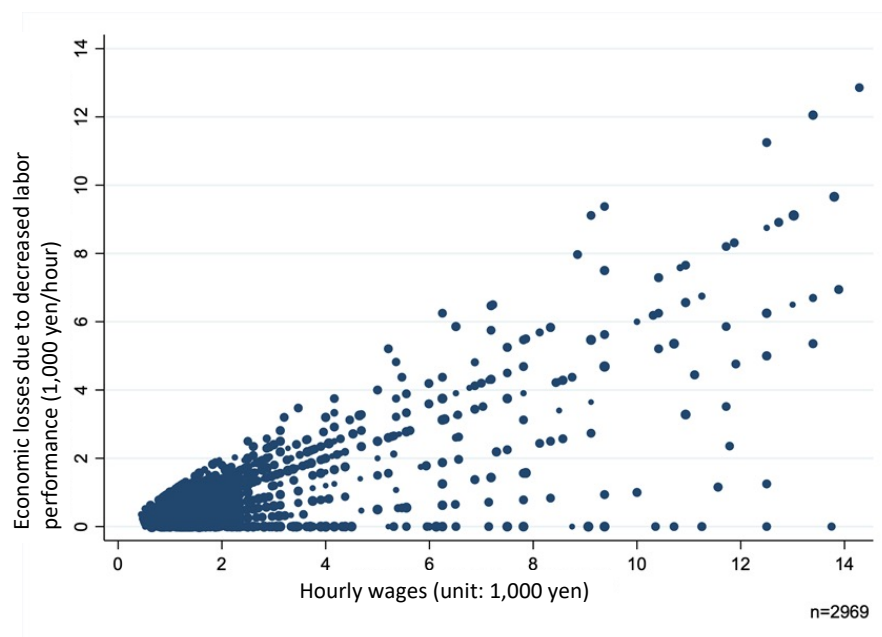
(September 2022, N=7758)



Source: Health and Global Policy Institute (2022)

Figure 13: Economic losses due to decreased performance (Presenteeism)

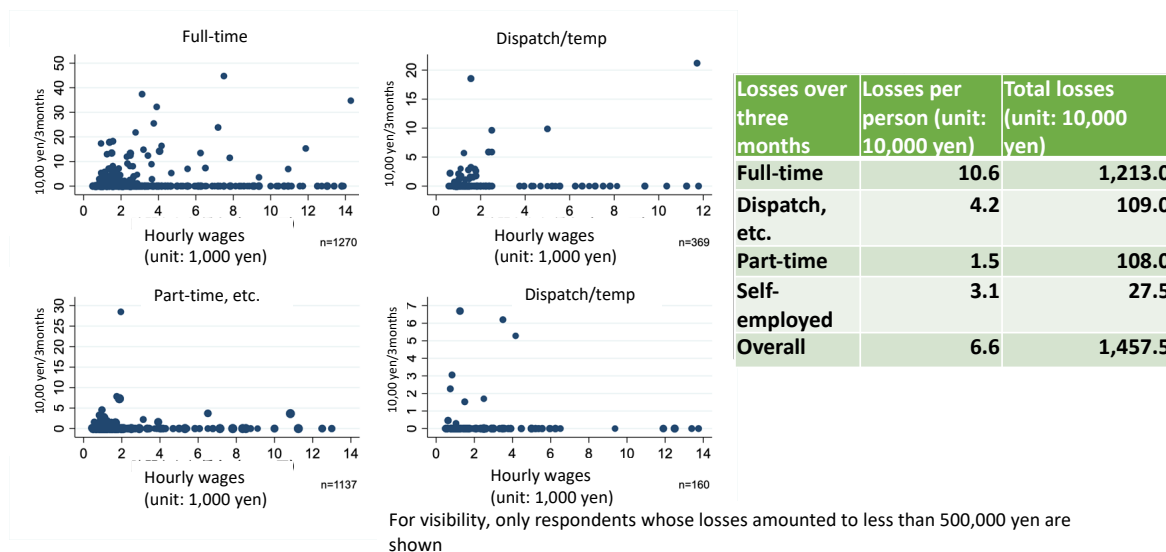
(September 2022, N=7758)



Source: Health and Global Policy Institute (2022)

Figure 14: Productivity losses incurred by absence, late arrival, or early departure due to symptoms of menstruation and menopause, by employment type

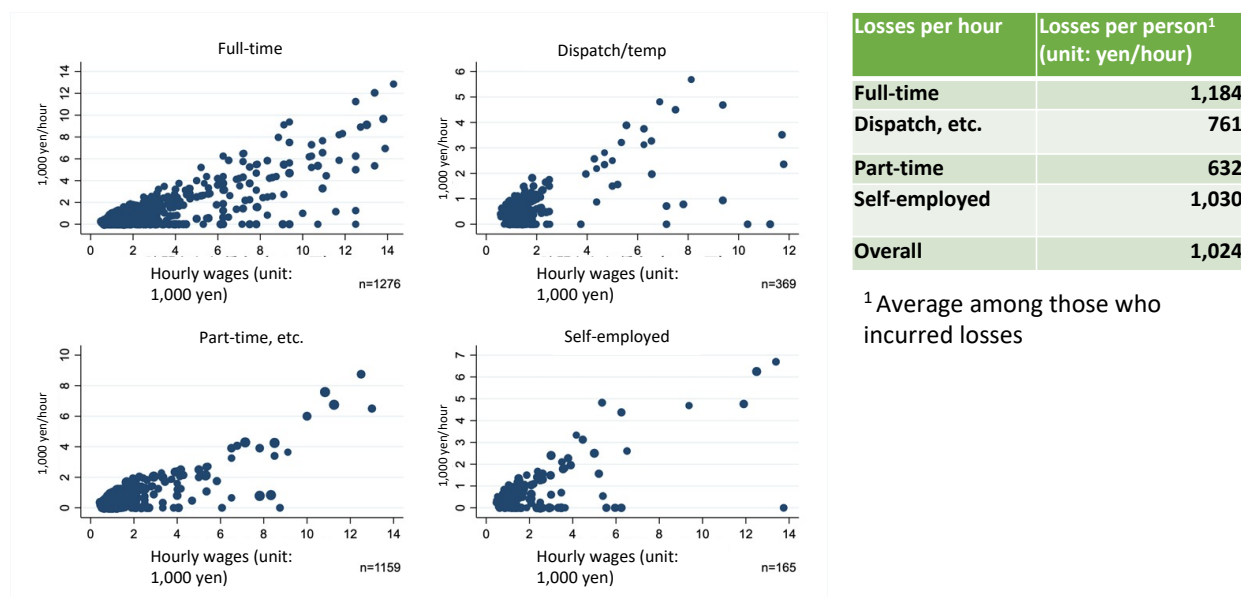
(September 2022, N=7758)



Source: Health and Global Policy Institute (2022)

Figure 15: Losses incurred by decreased labor productivity due to symptoms of menstruation and menopause, by employment type

(September 2022, N=7758)



Source: Health and Global Policy Institute (2022)

3.4. Disparities among companies, industries, occupations, and difference in perceptions between sexes

- **Companies made less progress in establishing or utilizing menstrual leave systems the smaller they were**
 - ✓ Companies were less likely to offer menstrual leave the smaller they were (for companies with 100 employees or less, 51%; for companies with 300 employees or less, 31%; for companies with 301 employees or more, 22%) as well as fewer people who took menstrual leave (for companies with 100 employees or less, 6.3%; for companies with 300 employees or less, 15.2%; for companies with 301 employees or more, 15.6%) (Figures 16 and 17). It should be noted, however, that even among the larger companies, the status of provision and use of menstrual leave is inadequate.
 - ✓ Regarding progress in establishing paid menstrual leave systems, the public sector was the most advanced (50%). Among private companies, paid menstrual leave systems were more well-established the larger the company (for companies with 100 employees or less, 13%; for companies with 300 employees or less, 25%; for companies with 301 employees or more, 31%) (Figure 16).
- **There are disparities in menstrual leave availability among full-time employment and other positions**
 - ✓ While 37.2% of respondents with full-time employment responded, “I have access to menstrual leave,” this response was selected by 12.4% of those working part-time and 5.4% of those who are self-employed or in similar positions (Figure 18).
- **There are disparities in the recognition of menstrual leave at their company among employment types, and general employees are less aware of such systems compared to managerial staff**
 - ✓ Among respondents serving as managerial staff, 48.2% said that their company have menstrual leave (Figure 20).
 - ✓ Among people performing on-site labor, such as at factories, and people serving in retail or service roles, 21.9% and 17.2% reported their company having menstrual leave (Figure 20).
- **There were differences among men and women in awareness toward menstrual leave availability**
 - ✓ When asked about the availability of menstrual leave at their workplace, more male respondents said “I do not know” compared to female respondents (Figure 22).
- **Even at companies that offer menstrual leave, there were differences in the degree to which people actually took it based on whether it was paid or not**
 - ✓ Among respondents serving at companies that offer paid menstrual leave, 47% said “There are people who have actually used the menstrual leave system,” while 21% of respondents serving at companies that offer unpaid menstrual leave said the system is utilized (Figure 23).

Figure 16: Availability of menstrual leave by number of employees

(September 2022, N=7758)

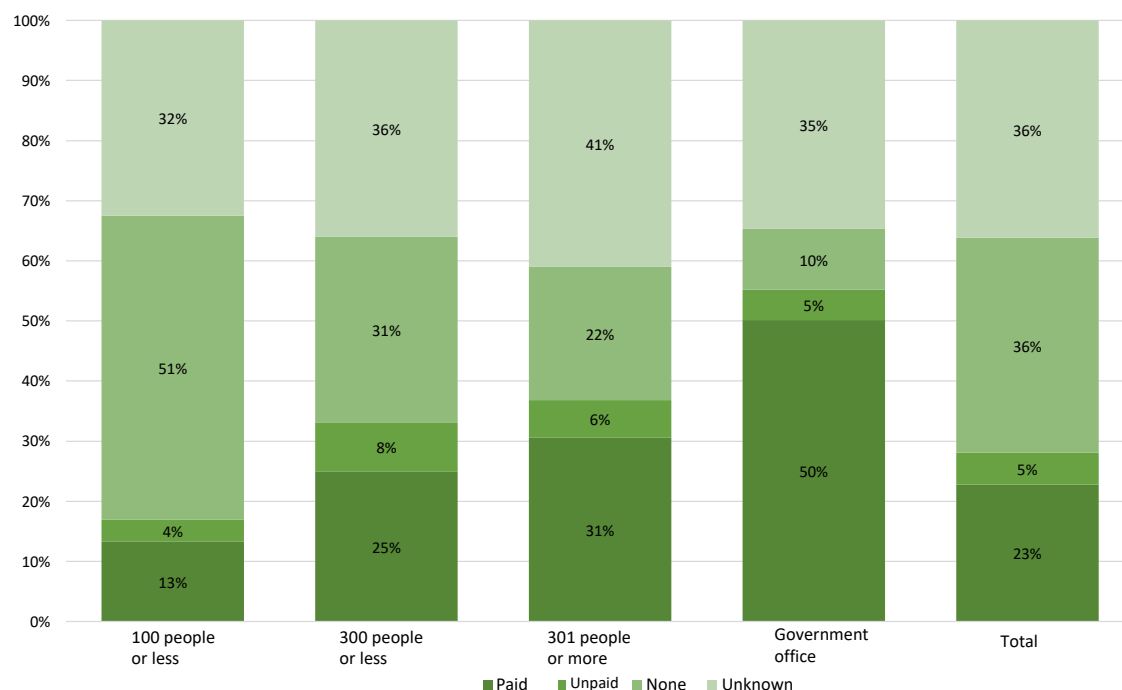


Figure 17: Utilization of menstrual leave by number of employees

(September 2022, N=7758)

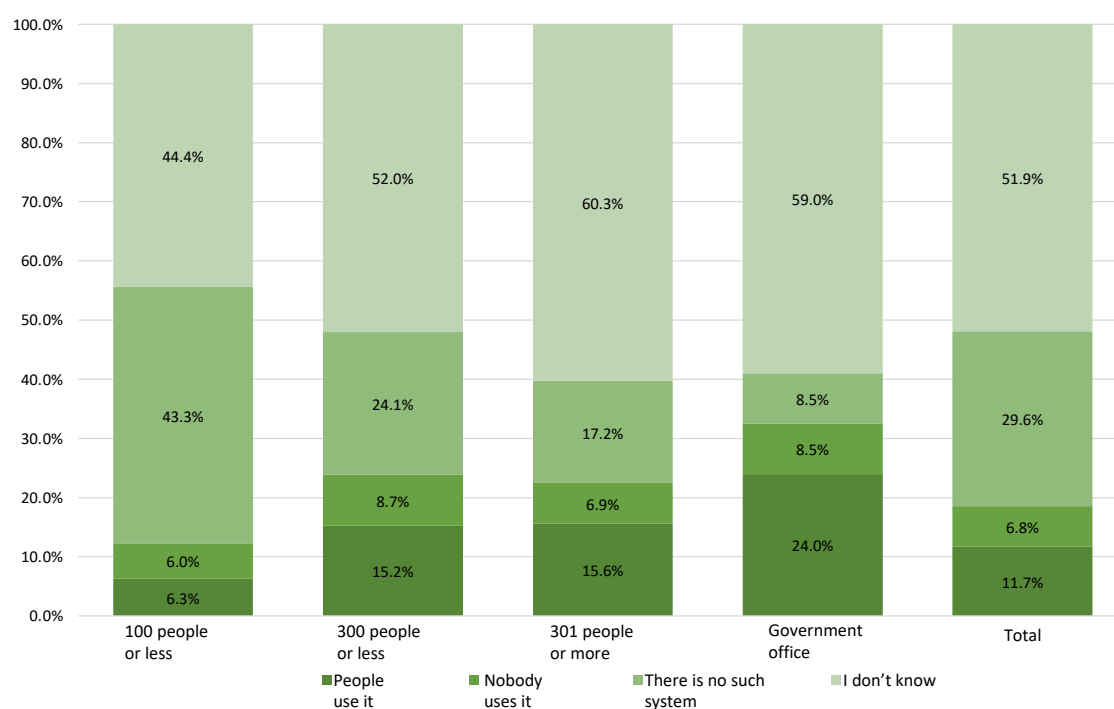


Figure 18: Availability of menstrual leave by employment status

(September 2022, N=7758)

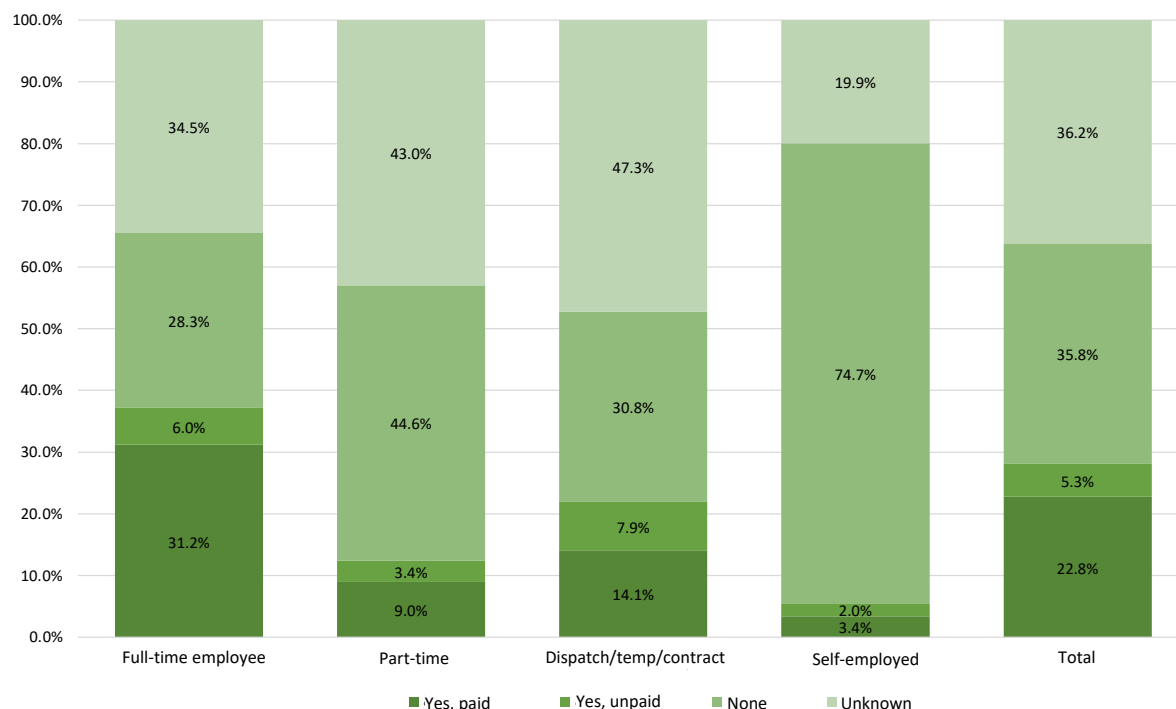


Figure 19: Utilization of menstrual leave by terms of employment

(September 2022, N=7758)

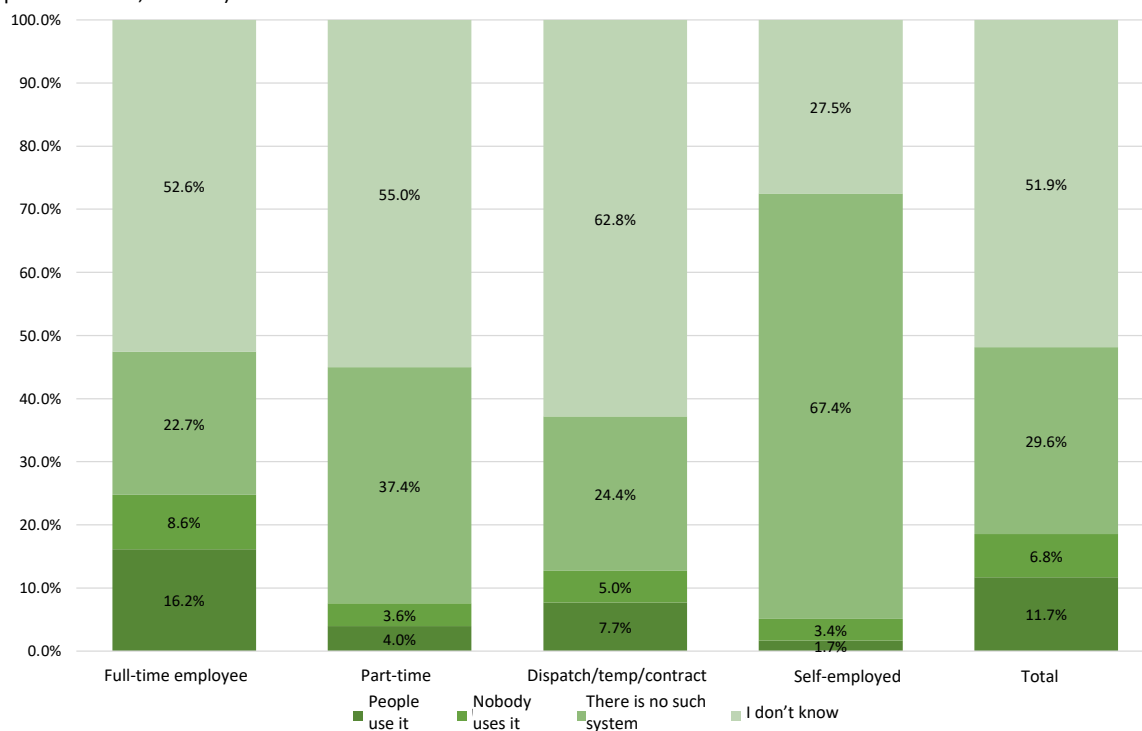


Figure 20: Availability of menstrual leave by job type

(September 2022, N=7758)

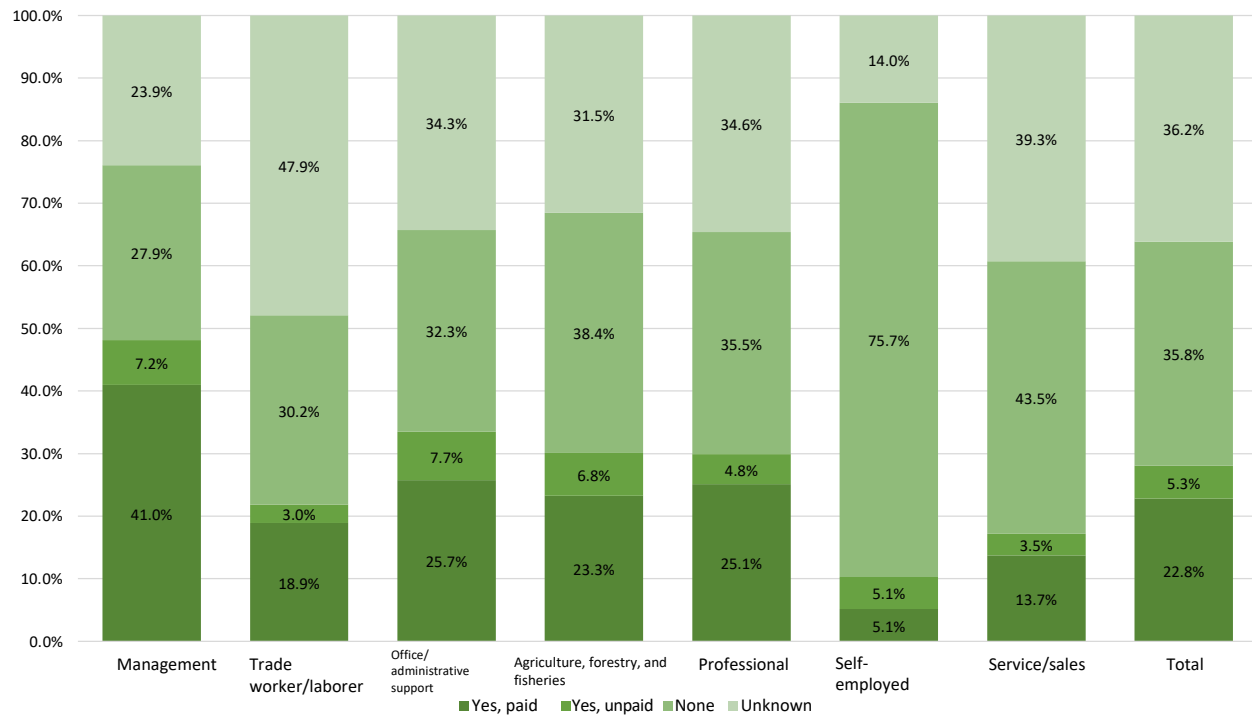


Figure 21: Utilization of menstrual leave by job type

(September 2022, N=7758)

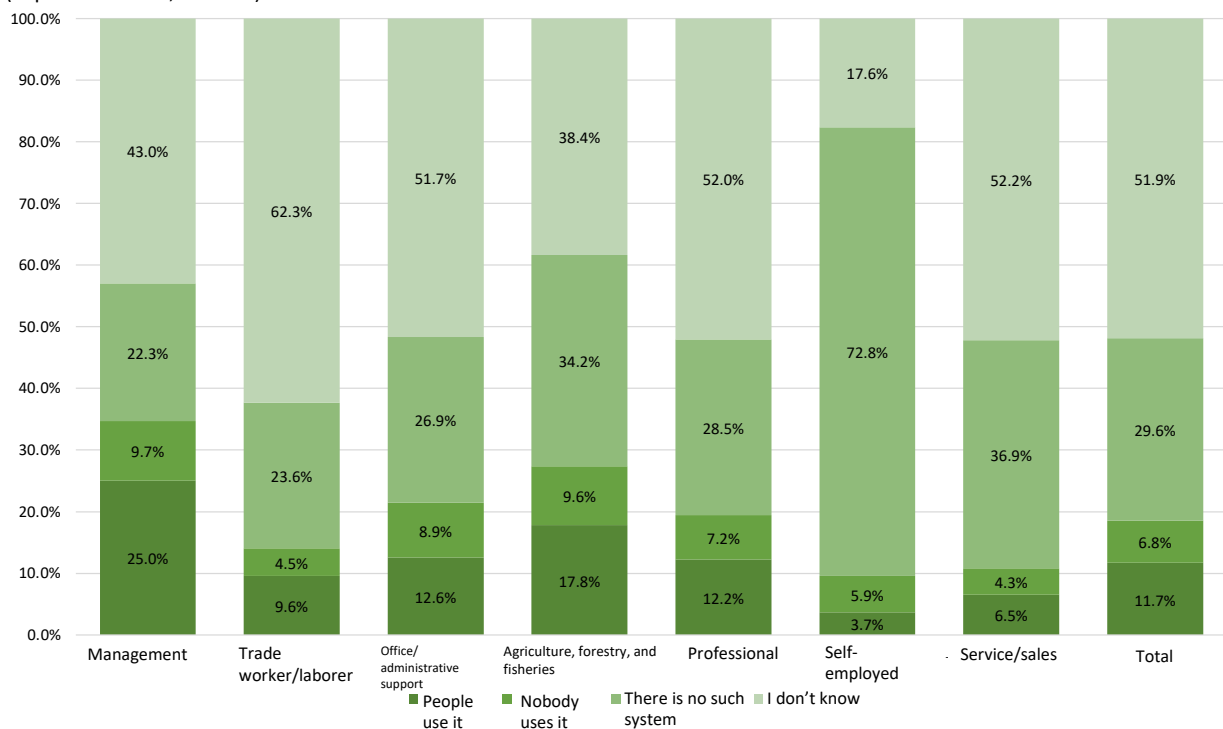


Figure 22: Availability of menstrual leave by biological sex

(September 2022, N=7758)

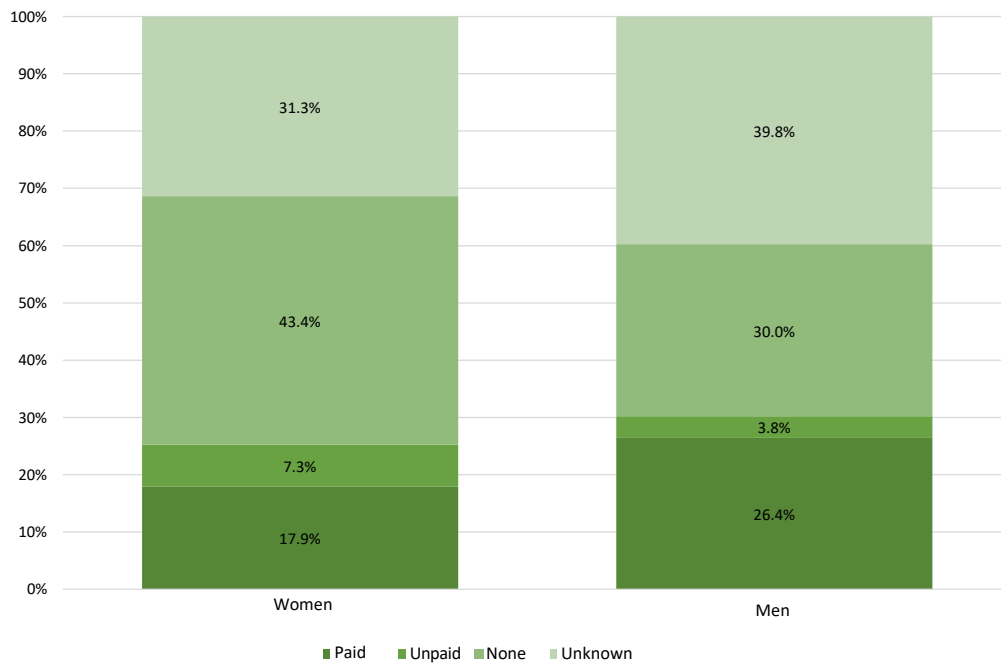
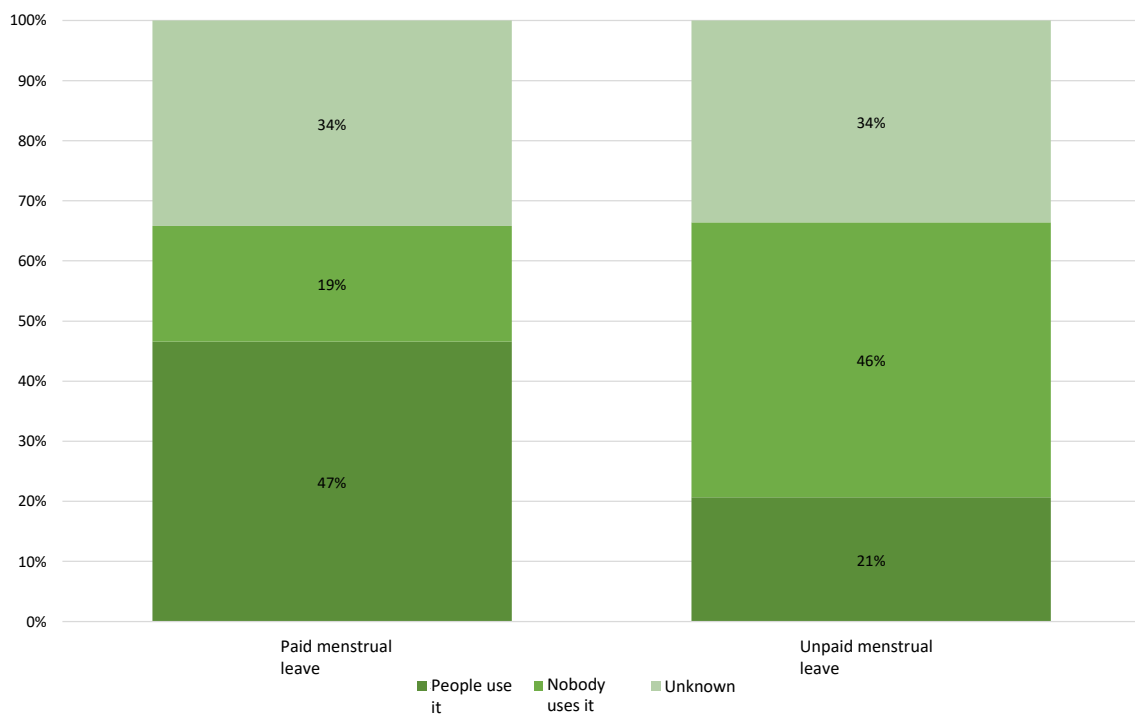


Figure 23: Utilization of menstrual leave by paid or unpaid

(September 2022, N=7758)



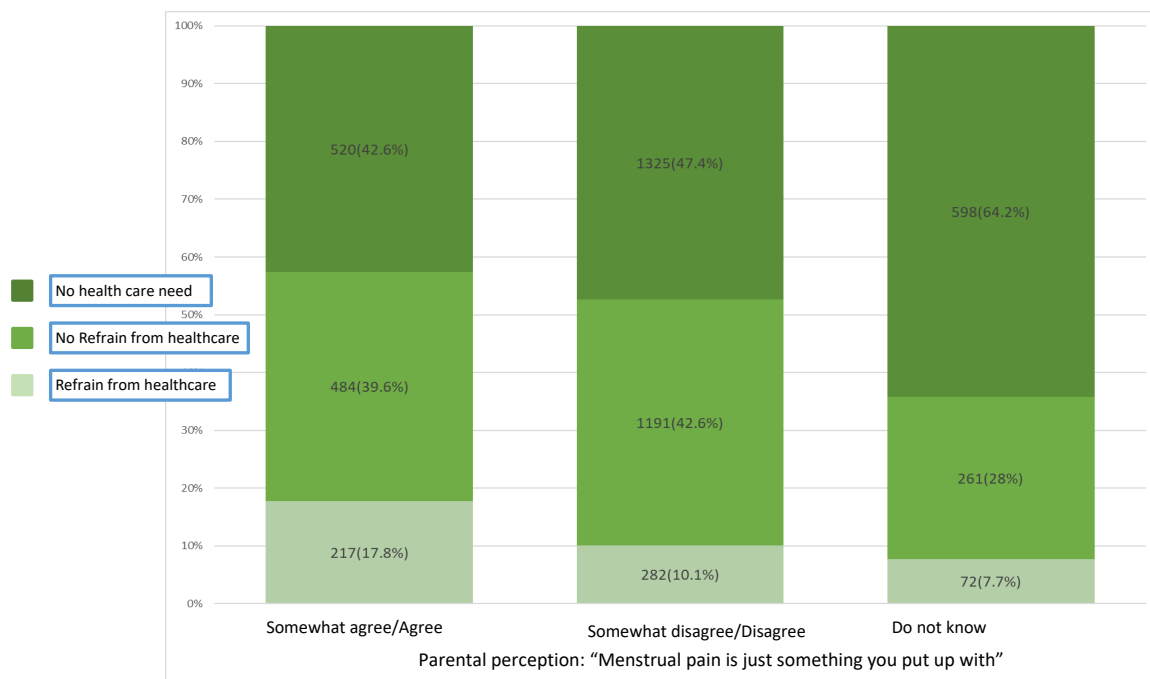
3.5. The effects of parents' perceptions on behaviors taken to address women's health-related issues

■ Awareness toward menstruation and other women's health-related topics among parents effects the medical examination-seeking behavior of their children

- ✓ The more likely parents' attitudes toward menstruation and related topics was that "Menstrual pain is just something you put up with," the more respondents refrained from seeking medical examinations (Menstrual pain is just something you put up with: Wilcoxon rank sum test: p-value < 2.2e-16, agree/somewhat agree vs. somewhat disagree/disagree) (Figure 24).
- ✓ The more likely respondents' parents were to express ideas like, "Taking LEP pills is embarrassing", the more respondents refrained from seeking medical examinations (Taking LEP pills is embarrassing Wilcoxon rank sum test: p-value < 2.2e-16, agree/somewhat agree vs. somewhat disagree/disagree) (Figure 25).
- ✓ Respondents who were more likely to report that their parents' attitudes toward menstruation and related topics was that "Menstrual pain is just something you put up with" used OTC medicines more frequently (Menstrual pain is just something you put up with: Wilcoxon rank sum test: p-value < 2.2e-16, agree/somewhat agree vs. somewhat disagree/disagree) (Figure 26).
- ✓ Respondents who were more likely to report that their parents were to express idea like, "Taking LEP pills is embarrassing" used OTC medicines more frequently (Taking LEP pills is embarrassing: Wilcoxon rank sum test: p-value < 2.2e-16, agree/somewhat agree vs. somewhat disagree/disagree) (Figure 27).

Figure 24. Parental awareness toward menstrual pain and reluctance toward medical examinations

(2022年9月 N=4950)



Source: Health and Global Policy Institute (2022)

Figure 25. Parental awareness toward LEP use and reluctance toward medical examinations

(2022年9月 N=4950)



Source: Health and Global Policy Institute (2022)

Figure 26. Parental awareness toward menstrual pain and frequency of OTC use

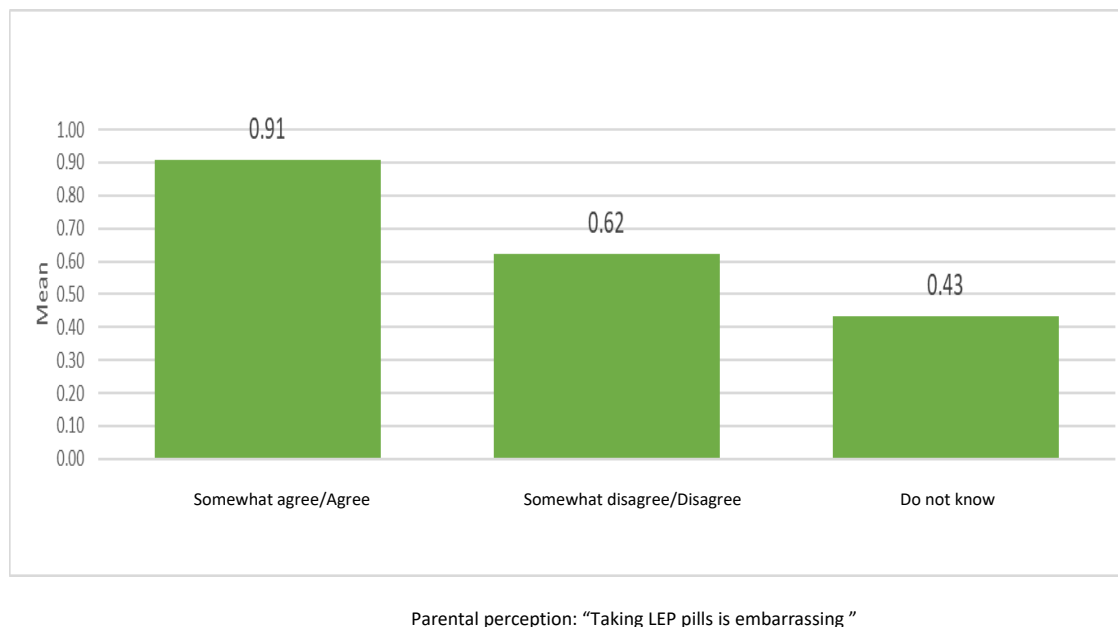
(2022年9月 N=4950)



Source: Health and Global Policy Institute (2022)

Figure 27. Parental awareness toward LEP use and frequency of OTC use

(2022年9月 N=4950)



Source: Health and Global Policy Institute (2022)

3.6. Educational opportunities and understanding toward women's health

■ Understanding toward women's health-related issues in the workplace is more closely related to the availability of educational opportunities than company size

- ✓ Workplace understanding toward women's health problems did not depend on company size (Workplaces with understanding, by size: 100 employees or less, 32%; 300 employees or less, 30%; 301 employees or more, 35%) (Figure 28).
- ✓ When comparing understanding by terms of employment and for all genders, a high proportion of respondents in full-time or self-employment reported their workplaces possessed understanding toward women's health problems. That proportion was smaller for part-time and contract employees, and there was not much variation among them (Workplaces with understanding, by employment type: full-time, 35.7%; part-time, 28.9%; fixed-term contract, 27.0%; self-employed, 34.5%) (Figure 29).
- ✓ Examining overall workplace understanding toward women's health problems by gender, the group that said their workplaces lacked such understanding most frequently was female respondents in part-time positions (43.8%). Examining full-time employees' responses, the largest proportion of men said their workplace had such understanding (36.3%) while the smallest proportion of women said there was understanding (24.4%) (Figure 30)

■ Educational opportunities at workplaces are limited

- ✓ Examining the relationship between opportunities to learn about women's health through training

and company size, across all company sizes, only about 10% of respondents said they had such training opportunities (Figure 31).

- ✓ Looking at training opportunities by position, 28.8% of those in managerial roles and 18.2% of those working in agriculture, forestry, and fisheries said they had opportunities to learn about women's health. For other industries, it was about 10% (Figure 32).
- ✓ Many of the respondents who reported having opportunities to learn about women's health in the workplace also said there is understanding toward women's health at their workplace. (Among those who have workplace training opportunities, by company size. With understanding: 100 employees or less, 67%; 300 employees or less, 65%; 301 employees or more, 70%. Without understanding: 100 employees or less, 29%; 300 employees or less, 25%; 301 employees or more, 30%.) (Figure 33)

■ Opportunities to obtain knowledge about women's health during school education are limited

- ✓ Among all respondents, 24.7% said they had opportunities to acquire knowledge regarding women's health during school education (Figure 34).
- ✓ By biological sex, 34% of women and 15.4% of men said they had opportunities to acquire knowledge regarding women's health during school education (Figure 34).

■ Awareness toward the fairness of menstrual leave is unrelated to biological sex but is related to the availability of educational opportunities

- ✓ Approximately 60% of all respondents who had opportunities to learn about women's health in the workplace or at school said, "Considering the differences between the sexes, menstrual leave is fair." Around 45% of both men and women who reported having no such opportunities said menstrual leave is fair (Figure 35).

Figure 28: Workplace understanding toward women's health issues by number of employees

(September 2022, N=7758)

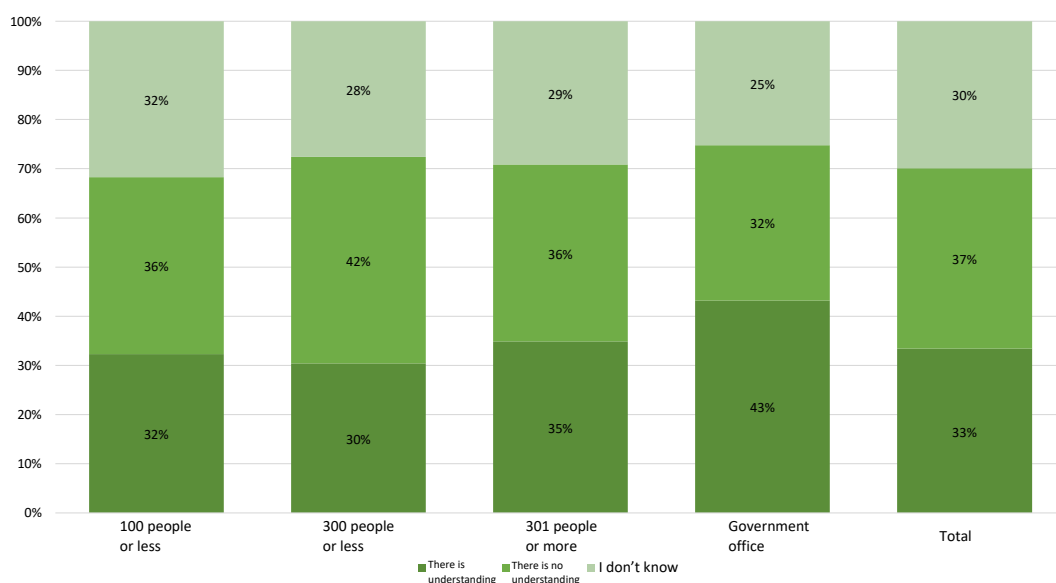


Figure 29: Workplace understanding toward women's health issues by employment status

(September 2022, N=10000)

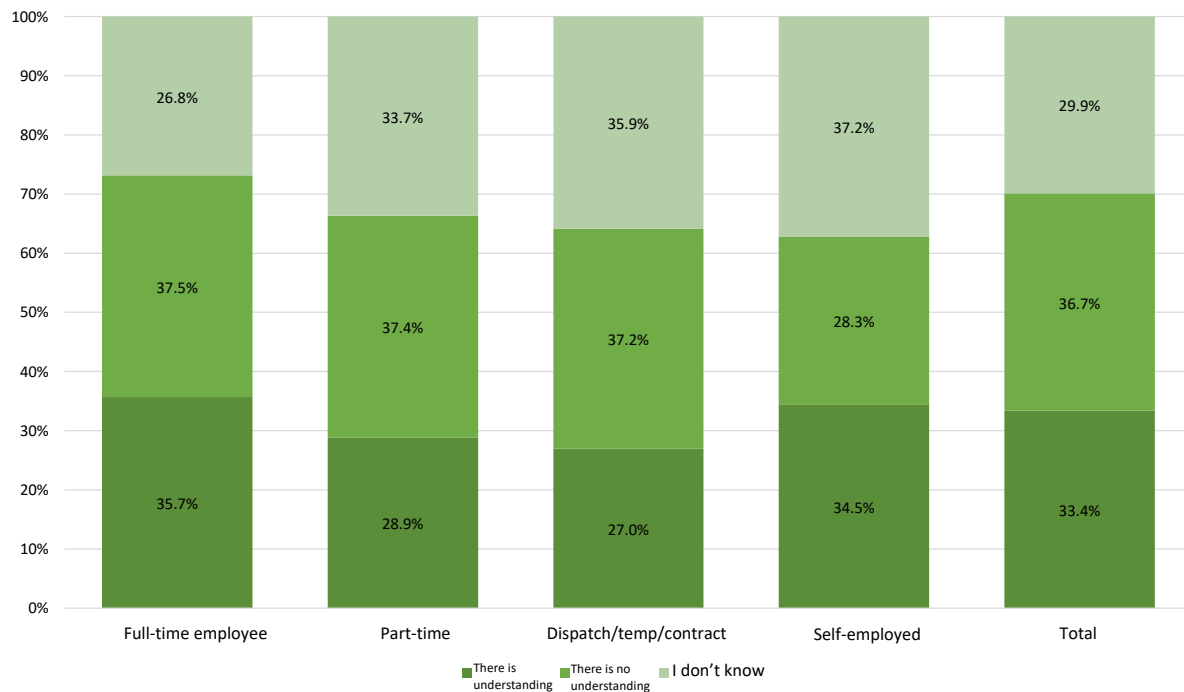


Figure 30: Workplace understanding toward women's health issues by employment status and biological sex

(September 2022, N=7758)

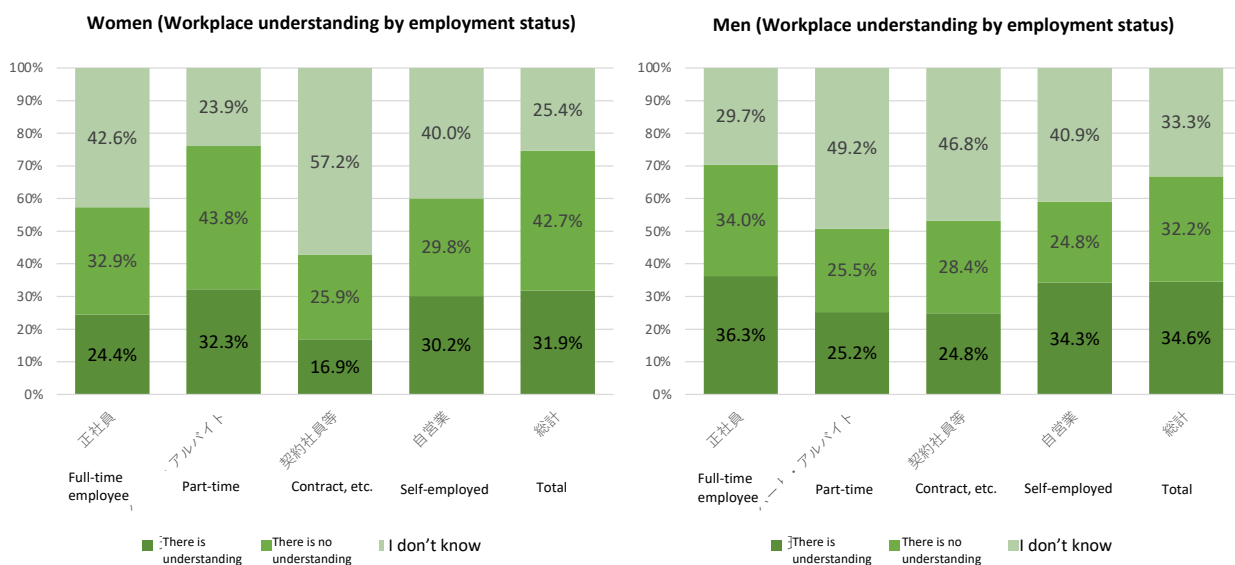


Figure 31: Opportunities to learn about women's health through workplace training programs by number of employees

(September 2022, N=7758)

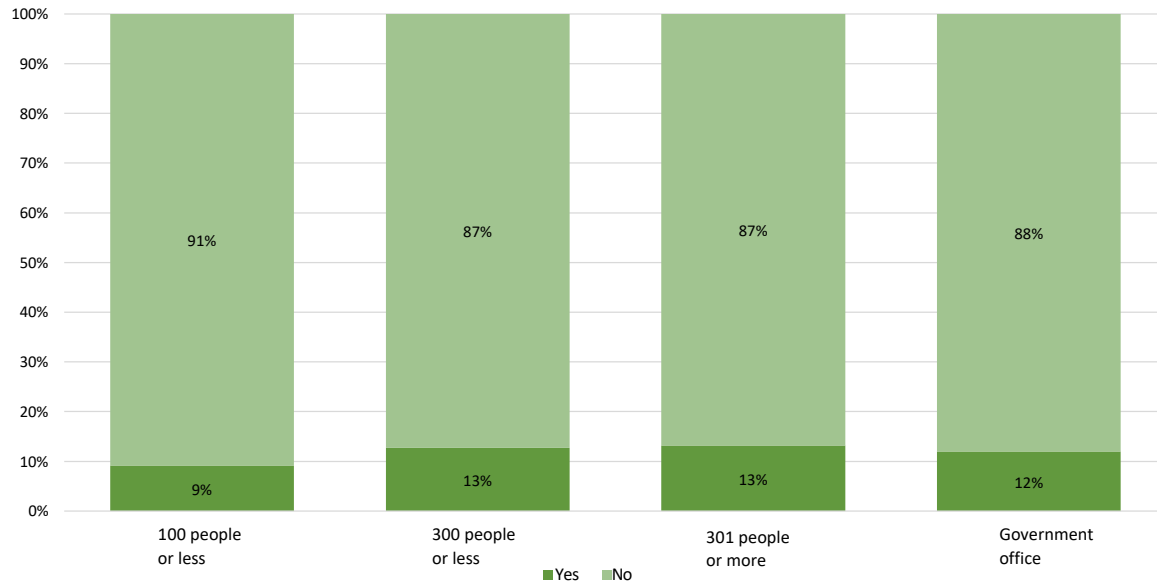


Figure 32: Opportunities to learn about women's health through workplace training programs by employment type

(September 2022, N=7758)

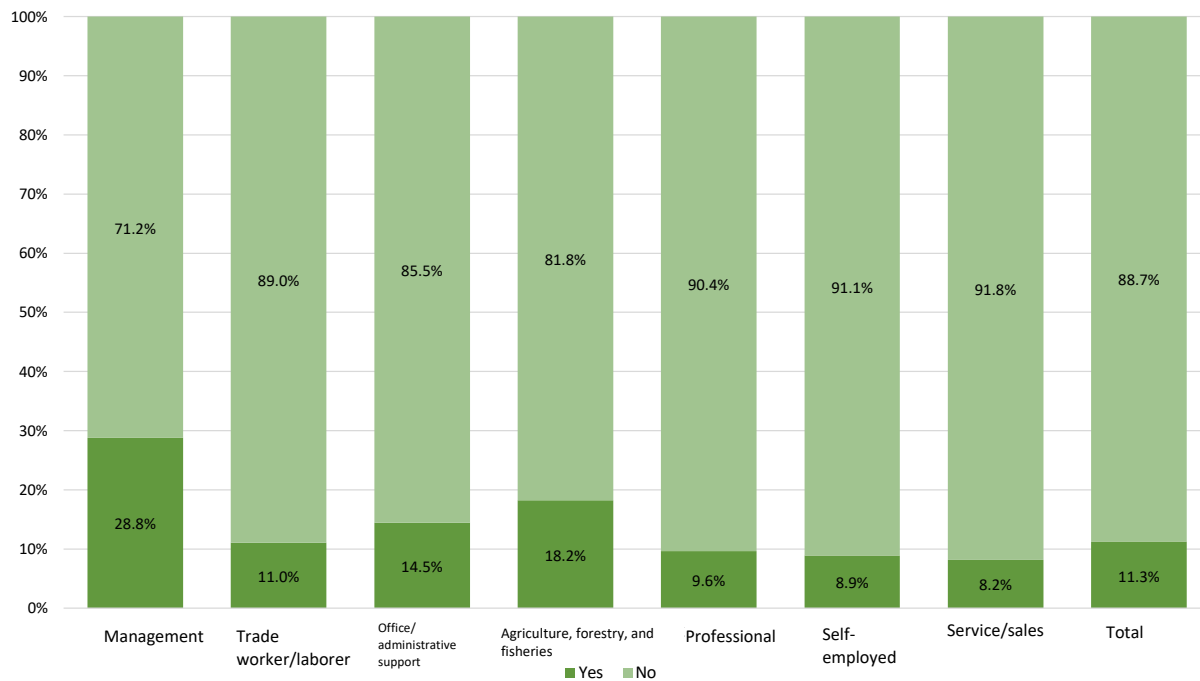


Figure 33: Workplace training programs by number of employees and workplace understanding

(September 2022, N=10000)

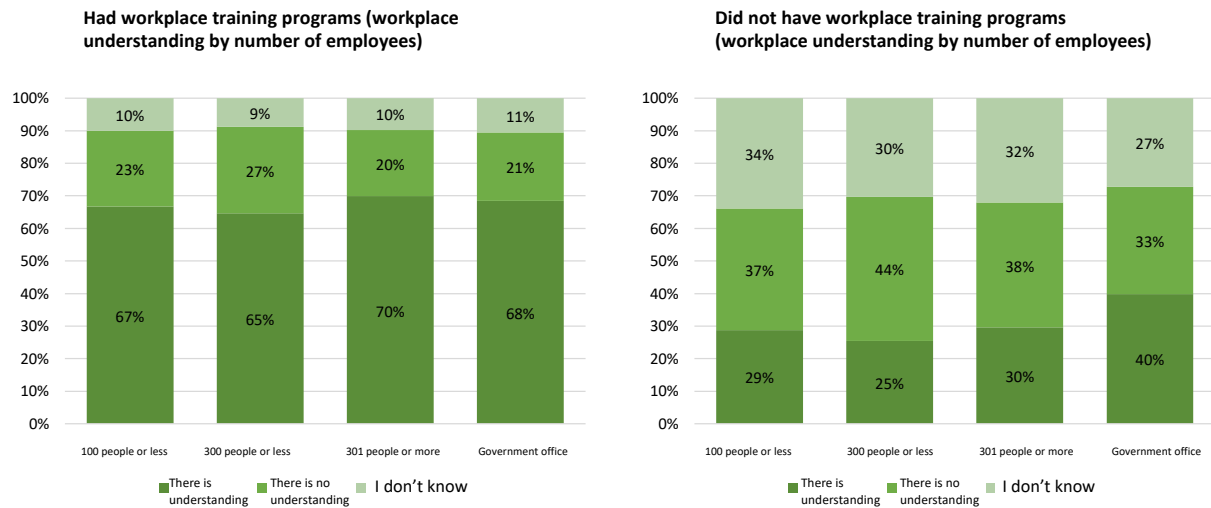


Figure 34: Opportunities to learn about women's health at school by biological sex

(September 2022, N=10000)

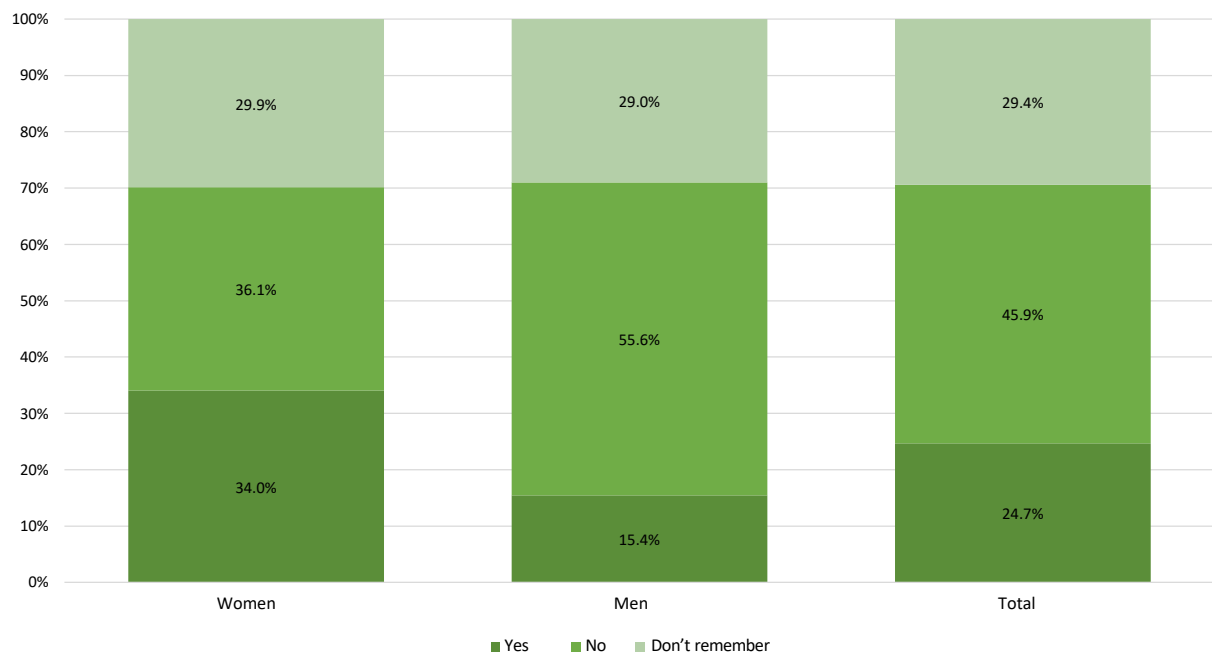
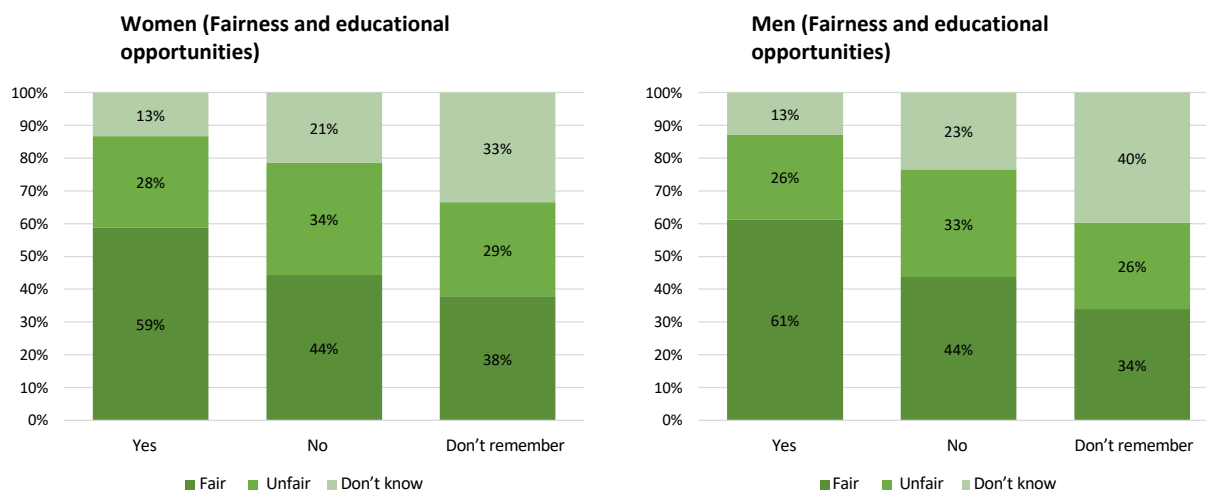


Figure 35: Biological sex, educational opportunities, and attitudes toward the fairness of menstrual leave

(September 2022, N=10000)



4. Recommendations

From the findings of this survey, it is clear that the symptoms of menstruation and menopause can significantly impact women's social engagement and cause economic losses. There were also stark differences in how women utilize menstrual leave according to the size of the company they work for and their employment status, which suggests that broad-ranging measures which encompass labor policy will also be necessary. We also found that opportunities to obtain knowledge about women's health are extremely limited for both men and women, and that preventing health disparities from taking root and reproducing will require the provision of learning opportunities throughout the life course, including during school education and through workplace training programs.

4.1. Recommendation 1: Recognize that initiatives for women's health are not only important from the perspective of improving sexual and reproductive health and rights for women, but they are also vital from the perspective of reducing socioeconomic losses.

■ Take action to uphold sexual and reproductive health and rights (SRHR)

- ✓ SRHR is defined as "A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes," and implies "the right to self-determination in affairs related to one's own body¹²." Steps must be taken to make society a place where everyone can enjoy the benefits of SRHR as basic human rights.

¹² <https://www.joicfp.or.jp/jpn/known/advocacy/rh/>

- ✓ Our survey found that about 80% of women in the workforce face challenges related to women's health, including the symptoms of menstruation and menopause. While providing the right medical treatment and care to enable early responses to each person's challenges will be crucial for upholding SRHR, about 10% of all respondents had experienced reluctance toward visiting an OB-GYN, citing reasons like "Menstrual pain is just something you put up with" or "Treating such symptoms with LEP pills is embarrassing." Such attitudes serve as obstacles to achieving SRHR.

■ **Expand opportunities for people to receive primary care and support from OB-GYNs to achieve SRHR**

- ✓ A report from the World Health Organization (WHO)¹³ outlines key issues that must be addressed in order to achieve high-quality SRHR services in the field of primary care, and initiatives are now advancing in many countries with the recognition that primary care and SRHR are closely interconnected.
- ✓ To build systems that facilitate early medical examinations and consultations to achieve SRHR in Japan, steps must also be taken to further disseminate women's health in the field of primary care. Regarding initiatives related to primary care, the Japan Medical Specialty Board began certifying "general practitioners" as a basic field of specialty in 2018. General practitioners are primary care specialists who provide ongoing consultations on various health topics for all ages, organs, and systems. Continuously building relationships of trust from before people develop secondary sexual characteristics and creating systems that make it easy for people to seek consultations – especially those for sensitive subjects related to women's health – will be important steps to take toward achieving SRHR.
- ✓ While advancing efforts for primary care, it will also be necessary to foster initiatives from OB-GYNs that aim to provide support. Systems must be established that facilitate early consultations, such as by encouraging people to have family OB-GYNs or that support online consultations through ICT. It will also be necessary to assign appropriate medical service fees that will enable systems allowing people to access these consultations from OB-GYNs to be established and maintained.

4.2. Recommendation 2: In view of the fact that many women are still suffering from dysmenorrhea or menopausal symptoms and refrain from seeking medical attention despite major struggles due to those conditions, advance initiatives centered around primary care and family obstetrics and gynecology to help women receive primary care from physicians.

■ **The economic losses associated with women-specific health concerns have societal impacts equal to other health issues like mental health issues and lifestyle diseases. Further action must be taken for women's health.**

- ✓ While differences in methods mean that special consideration must be given in interpreting the findings, a study¹⁴ that calculated the costs of lifestyle diseases including mental health disorders in terms of

¹³ [Sexual and reproductive health core competencies in primary care: attitudes, knowledge, ethics, human rights, leadership, management, teamwork, community work, education, counselling, clinical settings, service, provision \(who.int\)](https://www.who.int/publications-detail/sexual-and-reproductive-health-core-competencies-in-primary-care-attitudes-knowledge-ethics-human-rights-leadership-management-teamwork-community-work-education-counselling-clinical-settings-service-provision)

¹⁴ Health and Labour Sciences Research Grants (Comprehensive Research on Cardiovascular Disease, Diabetes, and other Lifestyle-Related Diseases): "Examination of Factors for the Labor Productivity Impact of Lifestyle-Related Disease Prevention, Including Mental Health" Research Report

labor productivity estimated that symptoms related to mental health and sleep lower labor productivity to 80% of full capacity (a decrease of approximately 20%) and that they cost approximately 40,000 per three months for each affected employee.¹⁵

- ✓ This survey found that on average, the symptoms of menstruation and menopause reduce productivity at work by approximately 38%. This equates to a loss of 66,000 yen per person per three months. It is likely that women's health challenges have as much of an impact on society as other health issues including lifestyle-related diseases and mental health issues. Women account for over 40% of the workforce, so supporting women's health will be an effective method of improving performance for employers while decreasing the economic losses to society incurred by such challenges, which amount to approximately 362.8 billion yen per year. Further steps to foster an atmosphere that promotes women's health in workplaces must be taken.
- ✓ In addition to removing obstacles to performance and other challenges in the workplace caused by women-specific health concerns, because all women are not members of the workforce, initiatives targeting all of society in addition to workplace environments must also be advanced to enable women to make full use of their inherent abilities regardless of the life stage of the individual.

■ **Early intervention and early treatment from physicians are vital for preventing social losses. Annual health checkups conducted at workplaces must be actively utilized as opportunities for early intervention and early treatment for women's health-related issues.**

- ✓ Our survey also found that women-specific health concerns harm performance for many women or cause them to face work-related troubles, but only about 5% of them undergo regular medical examinations.
- ✓ Around 10% of all women reported experiencing reluctance to see a physician when feeling unwell due to the symptoms of menstruation and menopause, even though they felt the need to see a doctor or to receive medical attention. The survey also found that the more people felt reluctant to visit a physician, the more they experienced absenteeism (which was reported by 5.4% with a history of hospital visits and 11.3% among those who experienced reluctance).
- ✓ A study comparing the cost-effectiveness of self-care and early physician intervention for the treatment of dysmenorrhea found that early consultation and treatment from a physician was more cost-effective than self-care.¹⁶ It is possible to stabilize the symptoms of women-specific health concerns through early detection and intervention.
- ✓ Recommendation 1 discussed the need to enhance support provided through primary care and from OB-GYNs, but it will be also possible to create more opportunities for early intervention and treatment

[201809009A0007.pdf \(niph.go.jp\)](#)

¹⁵ Relationship Between the Cost of Occupational Health Activities and People With Diseases That Affect Labor Productivity [201521006A0006.pdf \(niph.go.jp\)](#)

¹⁶ [Cost-effectiveness of the recommended medical intervention for the treatment of dysmenorrhea and endometriosis in Japan | Cost Effectiveness and Resource Allocation | Full Text \(biomedcentral.com\)](#)

for women's health by adding items related to women-specific health concerns in regular health checkups conducted at workplaces and then using the results.

■ **Rather than limiting leave to menstrual leave, discussions must be held to revisit the concept of menstrual leave and examine ideas like granting “wellness leave” that people of all genders can utilize to improve their health.**

- ✓ When the Labor Standards Act was enacted in 1947, it provided stipulations for establishing menstrual leave systems. According to an MHLW survey,¹⁷ usage of such systems peaked in 1965, when 26% of people used them. Usage gradually declined in later years, to 13% in 1981, 3.3% in 1997, and 0.9% in 2015. One reason for this decline may be discrimination and other negative effects for women who are granted menstrual leave have risen to the surface as a result of women's advancement in society after the enactment of the Equal Employment Opportunity Act and other such developments. Active discussions about abolishing menstrual leave were held in the 1980s.¹⁸
- ✓ Debates on how to best structure menstrual leave continue even today. In a manner similar to the discussions held in Japan in the 1980s, some people oppose menstrual leave as a factor that leads to discrimination against women in the workforce. Others say that it must be advanced as a right, referring to events like when the Government of Spain submitted the first law on paid menstrual leave in Europe to Parliament in May 2022.
- ✓ Given low menstrual leave utilization rates, a movement to rename “menstrual leave” to “wellness leave” is spreading to a growing number of companies in Japan. “Wellness leave” is characterized by the fact that such leave can be broadly utilized by people of all genders to care for themselves or family members, to provide long-term care, to cope with the symptoms of menopause, or to undergo fertility treatments. We think there is also room to consider redefining “menstrual leave” as a form of statutory leave that is not only available for women, but can be utilized by all members of the workforce to maintain and improve their health. It is also worth noting that if someone experiences symptoms that necessitates taking leave, then that is also a situation that necessitates a medical examination from an OB-GYN. As such, in addition to establishing menstrual leave systems, other necessary measures include introducing people who have taken leave to healthcare institutions at appropriate times.

4.3. Recommendation 3: Correct disparities among companies, industries, and occupations as well as difference between men and women, regarding general knowledge and symptoms for women's health.

■ **Action must be taken to correct disparities between large enterprises and small-to-medium enterprises in terms of awareness and systems related to women's health.**

- ✓ While menstrual leave itself is stipulated by the Labor Standards Act and, in accordance with that law, can be obtained at any company, our survey found that the smaller the size the company, the less likely it is to offer menstrual leave and the more difficult it is for employees to take. (Companies offering

¹⁷ Basic Survey of Gender Equality in Employment, FY2020

¹⁸ [Addressing Menstruation in the Workplace: The Menstrual Leave Debate - The Palgrave Handbook of Critical Menstruation Studies - NCBI Bookshelf \(nih.gov\)](#)

menstrual leave: companies with 100 employees or less, 51%; companies with 300 employees or less, 31%; companies with 301 employees or more, 22%. Companies where people actually took menstrual leave: companies with 100 employees or less, 6.2%; for companies with 300 employees or less, 15.3%; for companies with 301 employees or more, 15.6%.)

- ✓ When partial amendments to the Act on the Promotion of Women's Active Engagement in Professional Life were enacted in 2022, the scope of businesses obligated to formulate and submit General Employer Action Plans as well as to endeavor to disclose information on the active engagement of women was expanded to include businesses with 101 to 300 employees. Until now, an MHLW initiative for promoting women's health called the Eruboshi ("L Star," in which "L" stands for "Lady, Labour, and Laudable") certification has mainly focused on large enterprises. In the meantime, initiatives for SMEs have not progressed. Expectations are high for this certification program to be expanded to also target SMEs in the future. When doing so, it is desirable that efforts it evaluates are not limited to those undertaken by companies voluntarily, but that ample consideration is also devoted to providing the necessary financial support and other forms of support that will help companies advance such efforts.
- ✓ There is also a persistent gap between the availability of such systems and their actual use. Actions must be taken to inform the public about such systems, including when menstrual leave has been renamed to "wellness leave," as well as to encourage the utilization of said systems.

■ **Address the gender gap in awareness. In our survey, many men said they "do not know" about women's health concerns. Educational opportunities are limited and must be expanded for all genders in the future.**

- ✓ When asked about understanding toward women's health in their workplace, the largest proportion of male respondents said "I don't know" (33.3%), while the most popular response among women was "I do not think there is understanding" (42.7%). This suggests that men are unaware of issues and problems in the workplace that are related to women's health.
- ✓ Both male and female respondents who said they had opportunities to learn about women's health during school education and similar times thought that menstrual leave systems were fair when considering the differences between the sexes. This suggests that comprehensive sex education may be necessary to bridge the gaps in awareness between men and women.
- ✓ In Japan, the majority of people in managerial positions are still men, and men comprise over half of the workforce. To improve workplace environments, it will be vital for men to notice and be understanding toward women's health-related issues.

■ **Correct awareness gaps among positions. Awareness toward each support measure is not as widespread among general staff as it is among managerial staff. Steps must be taken to build awareness among general staff.**

- ✓ While around 60% of respondents in managerial positions reported having access to menstrual leave systems, only around 20% of respondents who were general staff (particularly those performing on-site labor, such as at factories) or in retail or service roles said they have menstrual leave systems. This

shows a gap in awareness toward the existence of menstrual leave among job types and positions.

Establishing various systems related to women's health in companies will require efforts to build greater awareness toward women's health in general among managerial staff. While doing so, in light of various aspects of current circumstances (such as the fact that each support measure has yet to be disseminated among general staff to the same degree as managerial staff), it will be necessary for those in managerial positions to recognize factors that led to this awareness gap and to provide initiatives that increase awareness among members of general staff.

- ✓ In addition, when comparing the degree to which respondents utilized menstrual leave, we found a difference between full-time employees and employees in part-time and dispatch positions (which were 31.2%, 9.0%, and 14.1% respectively). Comparing economic losses associated with this leave, there is also a significant difference between full-time employees and part-time, dispatch, and other types of workers in productivity losses due to absenteeism, arriving late, and leaving early due to the symptoms of menstruation and menopause (which amounted to 106,000 yen per person among full-time employees; 15,000 yen per person among part-time employees; and 42,000 yen per person for dispatch positions). This gap may be the result of the latent disparities in pay and other benefits and, in the case of dispatch and part-time employees, a workplace environment in which it is difficult for people to obtain leave when feeling unwell.

4.4. Recommendation 4: Create opportunities for comprehensive sex education during school and provide guardians with opportunities to refresh their education on such subjects through parents' classes and workplace training programs.

■ Expand opportunities for people to acquire knowledge regarding women's health during school education, workplace training, and other such times.

- ✓ Only about 10% of both male and female respondents said they had learned about women's health during workplace training programs and similar opportunities. There were no differences in the availability of such opportunities by region or employment status. About 20% of those in managerial roles and in agriculture, forestry, and fisheries said they had such opportunities. It was clear that learning opportunities are insufficient overall.
- ✓ In terms of learning opportunities at school, only 25% of all respondents said they had past opportunities to learn about women's health. It is also likely that the majority of respondents were not provided with adequate opportunities to learn about women's health during school education.
- ✓ Among people who did have opportunities to learn about women's health at school or during workplace training programs, more people said "Menstrual leave is fair when considering the differences between the sexes" (Those with opportunities: 60%; those without: 41%). The more likely a respondent was to say that there was no understanding toward women's health in their workplace, the more likely they were to report that nobody in their workplace actually took menstrual leave. Educational opportunities for people to learn about women's health at schools and workplaces must be expanded to further disseminate menstrual leave.

■ **Intensify efforts to deepen school education on SRHR that encompasses topics in women's health.**

- ✓ Sex education is currently provided as part of school education from elementary to high school in accordance with the Courses of Study curriculum guidelines from the Government. At the global level, the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the United Nations Population Fund (UNFPA) called for providing Comprehensive Sexuality Education (CSE) to young people in 2018, but sex education currently provided in Japan does not always conform to such international guidelines. The CSE content recommended by UNESCO not only includes information related to the body, but also covers broad social and cultural content, like gender and human rights; as well as the skills young people need to make independent decisions about their own health and wellbeing. The objective of CSE is to achieve wellbeing for all people, and that objective is premised on upholding human rights. In CSE, individuals have the right to enjoy safe sex with the right to self-determination in affairs related to their own bodies, and it teaches various forms of knowledge to help people enjoy these rights. Promoting SRHR is an essential action that forms the foundation of understanding toward women's health. CSE that conforms to international guidelines should be incorporated into school education in Japan.
- ✓ Taking a closer look at women's health coverage during school education, there are currently very few lessons covering the problems women actually face as well as methods for addressing them. Schools must provide opportunities for students to learn about topics like dysmenorrhea and menopause and what measures can be taken to help alleviate their symptoms.

■ **Awareness toward women's health issues among parents can have effects on the actions people take to cope with those issues. To correct knowledge disparities, opportunities for people to acquire knowledge that is accurate must be secured during school education and similar times.**

- ✓ This survey found that the more likely respondents were to think their parents' attitudes toward menstruation and related topics were that "Menstrual pain is just something you put up with" or "Treating such symptoms with LEP pills is embarrassing," the more they refrained from seeking medical examinations.
- ✓ Respondents who reported parental perceptions that "Menstrual pain is just something you put up with" also used OTC medicines more frequently. It is likely that many respondents choose to use OTC medicines instead of seeking medical attention when experiencing menstrual symptoms.
- ✓ Preventing disparities in the contexts of health and poverty from taking root and reproducing is a widely recognized problem. We can assume that parents' attitudes toward menstruation and related topics can influence the behaviors of their children, which can lead to feelings of reluctance toward seeking medical examinations as well as decreased productivity. In turn, these attitudes and behaviors are then passed down to the next generation. In order to stop this chain of events from reoccurring, opportunities for people to learn correct information must be provided in school education, workplace training programs, and medical examinations from OB-GYNs, pediatricians, and other physicians.

- ✓ In particular, based on the perspective that parents' attitudes influence the behavior of their children, in addition to general training programs at workplaces, providing parents with this knowledge during opportunities to learn about the health of their children (such as at infant health checkups and vaccinations) is likely to be effective.
- ✓ Studies on SDH suggest that health promotion requires interventions targeting society in addition to those targeting individuals (namely, health education).¹⁹ We believe implementing CSE in school education and workplace training programs will improve health literacy on the individual level as well as transform prevailing attitudes in society in which sex education or ideas related to gender differences are viewed as taboo. In turn, this will help all people attain complete physical, mental, and social wellbeing.

5. Survey overview

5.1. Research design

Cross-sectional study

5.2. Respondents

The survey was administered to men and women ages 25 to 59 throughout Japan selected from the monitor panel of a survey company. Quota sampling was used to select respondents by attributes like region and age in ratios that correspond to the demographics and distribution of the total population of Japan.

5.3. Survey method

A questionnaire was conducted among the monitor panel of the company that assisted with the research to determine awareness and socioeconomic conditions regarding productivity losses, menstrual symptoms, menopausal symptoms, care behaviors, and women's health. The survey was conducted in September 2022.

5.4. Ethical considerations

This survey was conducted among people who gave informed consent after explaining the objective of the research (ultimately, we received 10,000 responses). The survey did not include any question that could be used to identify individual respondents, such as respondent name, and the data we collected was stored and analyzed in a manner to prevent any risk of personal information being leaked. The survey was conducted after receiving approval from the Ethics Review Committee of the Health Outcome Research Institute.

5.5. Analytical method

¹⁹ [What is Health Promotion? \(umin.ac.jp\)](https://www.umin.ac.jp/health/promotion/)

Descriptive statistics were calculated and some cross tabulations were performed in this survey. In addition, multiple logistic regression analysis was conducted using each indicator as the dependent variable. Each analysis was stratified by gender and age group as appropriate. In all analyses, a p-value of less than 0.05 was considered statistically significant. In calculating labor productivity, data cleaning was conducted under the following conditions.

- Responses related to hours and days worked: the top and bottom 1% were deleted.
- Wages per hour (hourly, daily, etc.)
 - Remove the top and bottom 1%.
 - In the case of much lower than determined-minimum wage (i.e., less than 800 yen/hour), the hourly wage was calculated based on the annual income of the worker (median of the categorical responses).
 - If the worker's income is 0, he/she is excluded from the analysis of productivity loss.
- Number of hours worked late/leaving early: Exclude cases in which the respondent reported late/leaving early hours that were greater than the average hours worked.
- Weights based on Census 2020: Population weights
 - Population weights: Population weights are calculated by region (Hokkaido/Tohoku, Kita-Kanto/Koshinetsu/Hokuriku, Minami-Kanto, Tokai, Kinki, Chugoku/Shikoku, Kyushu/Okinawa) and by 5-year age group. Used in the analysis.
 - Employment status weights: Using the labor force status by sex and age, we created weights using the ratios of full-time employees, dispatched workers, part-time workers, self-employed, unemployed/houseworkers, and students in each 5-year age group. Used for analysis.

5.6. Limitations

In recent years, there has been a decline in the efficacy of traditional survey methods due to factors such as decreased response rates for mail-in surveys or in-person interviews and expansions in survey restrictions, which has led to higher expectations for internet surveys. However, the conduction of a survey on the internet introduces a fixed sampling bias in that it selects only for respondents who can use the internet, and hence have a certain level of education, as internet literacy is generally correlated with education level.^{20,21,22,23,24} It is important to take this limitation into account when interpreting the results of this survey. Given the nature of this research as a cross-sectional study, causal relationships cannot be inferred.

5.7. Conducting organizations

²⁰ Smith MA, Leigh B, 1997, Virtual subjects: Using the Internet as an alternative source of subjects and research environment. *Behav Res Meth Instrum Comput*, 29, 496–505.

²¹ Osomi N, Maeda T, 2007, Problems with online surveys - Observations from experimental investigations (Part 1) (From members). *Japan Association for Public Opinion and Research Newsletter Yoron*, 100, 58-70.

²² Osomi N, Maeda T, 2008, Problems with online surveys - Observations from experimental investigations (Part 2) (From members). *Japan Association for Public Opinion and Research Newsletter Yoron*, 101, 79-94.

²³ Miura A, Kobayashi T, 2015, Monitors are not monitored: How satisficing among online survey monitors can distort empirical findings. *Japanese Journal of Social Psychology*, 31, 1–12.

²⁴ Hanibuchi N, Muranaka A, Ando M, 2015, Challenges of Data Collection through Internet Research: Analysis of “Frivolous” Responses, Response Time, and Geographical Pattern. *E-journal GEO*, 10 (1), 81-98.

Efforts to design the overall survey, develop survey items, administer the survey, conduct statistical analysis, and compile policy recommendations were centered around the HGPI Women's Health Project Team.

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Sponsoring companies and organizations

Bayer Yakuhin, Ltd
Fuji Pharma Co., Ltd.

*While opinion exchanges were held with supporting companies and organizations when conducting this survey, decisions regarding whether to reflect opinions shared were made independently by the survey team.

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