

Women's Occupational Health: The Impact of Dysmenorrhea on Women in the Workplace

by

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Abstract

Occupational health outcomes differ between men and women due to differences in their physiology. For instance, working women will face the problem of dysmenorrhea, and some women who experience dysmenorrhea will choose to miss work, which will affect their working experience, resulting in a gap in occupational health between women and men. The history of women entering the workplace is not as long as that of men. It was not until World War I that more and more women began to work outside due to the increased demand for production during the fierce war. For a long time, women's health demands in the workplace have been ignored. Many occupational health-related studies have ignored the impact of menstruation on the health of working women. At the same time, along with the neglect of the health of working women brought about by gender discrimination, the lack of attention to the health of women who experience dysmenorrhea will also lead to inequality in women's occupational health.

Dysmenorrhea is one of the most common menstrual-related health problems, with prevalence ranging from 16% to 91% in women of reproductive age(15-49 years), with 2% to 29% of women in the study experiencing severe pain. Symptoms of dysmenorrhea are not only the result of physiological factors such as hormonal imbalances and lifestyle, but also psychological and social factors such as anxiety, depression, stress, interactions with friends, family colleagues, and the work environment that increase the risk of dysmenorrhea. The physical and psychological

factors accompanying dysmenorrhea significantly affect working women' s health and quality of life.

This essay discusses the obstacles of dysmenorrhea to women' s occupational health through internal and external factors, then discusses reducing the impact of dysmenorrhea on women' s occupational health.

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1.0 Introduction

Dysmenorrhea is a common problem in women who menstruate. Primary dysmenorrhea, defined as menstrual pain without underlying pathology,¹ is the most common cause of dysmenorrhea in women. Symptoms usually begin with menstruation, and commonly associated symptoms often include nausea and vomiting, diarrhea, headache, fatigue, and irritability.² Dysmenorrhea can also be accompanied by dizziness and depression.³ The symptoms of dysmenorrhea may affect women's study and work efficiency. Furthermore, dysmenorrhea and its associated symptoms may lead to a decrease in the productivity of the companies in which these women work, thereby impacting the economic benefits associated with daytime work.

For these reasons, the potential impact of dysmenorrhea symptoms on women's occupational health is an important research question, and research is needed to examine the factors that affect women's occupational health by dysmenorrhea symptoms and their severity. Our research aims to understand the prevalence and severity of dysmenorrhea symptoms among working women; explore which of these factors may hinder their performance; and discuss how to help working women who are affected by dysmenorrhea symptoms.

I present qualitative survey data collected from employees (n = 167) working in electronics factories and businesses. I conclude that menstruating individuals perform additional emotional labor. I argue that working women who suffer from dysmenorrhea typically experience three barriers at work: managing pain and leaky bodies, lack of access to facilities, and managing menstrual stigma and discrimination.

I discuss the extra labor and associated gynecological health conditions performed by people who experience menstruation. I conclude by advising on supportive workplace practices

and policies from the perspectives of individuals, employers, and governments to better meet the needs of employees to manage menstrual health and well-being.

Disclaimer: People who experience menstruation include women who are born biological women, some transgender men and intersex people, etc. However, since the respondents of this questionnaire were all identified as being born biological women, they are the only individuals that my findings and analysis strictly apply to.

2.0 Background

2.1 Understanding Menstrual Health

2.1.1 The Etiology and Pathogenesis of Dysmenorrhea

The occurrence of primary dysmenorrhea is mainly related to the increased synthesis and release of prostaglandins in the endometrium during menstruation. The prostaglandin $F2\alpha$ in the endometrium and menstrual blood of patients with primary dysmenorrhea was significantly higher than that in normal women, and the elevated content of prostaglandin $F2\alpha$ was the main factor causing dysmenorrhea.⁴ Prostaglandins have the effect of stimulating uterine smooth muscle contraction, causing increased uterine tone and excessive spasm, leading to dysmenorrhea. In addition, uncoordinated uterine smooth muscle contractions can lead to an insufficient supply of blood to the uterus. When the intrauterine pressure exceeds the mean arterial pressure, it can cause uterine ischemia, which stimulates the pain fibers of the uterine autonomic nerve and causes dysmenorrhea.⁵

The most common cause of secondary dysmenorrhea is endometriosis. Endometriosis is an estrogen-dependent inflammatory disease characterized by ectopic growth of the endometrial stroma and glands. The main clinical features are dysmenorrhea, chronic pelvic pain, and infertility.⁶

Endometriosis is a noncancerous condition in which endometrial tissue in the uterus develops elsewhere in the body. It usually occurs in the lower abdomen or pelvis but can come from any organ or tissue. Endometriosis is a relatively common disorder, affecting 6%-10% of

women of reproductive age.⁷ The most common symptom of endometriosis is pain, which tends to appear in the lower abdomen or pelvis because at the end of the menstrual cycle, the endothelial tissue — wherever it appears — ruptures and bleeds. If the bleeding occurs outside the uterus, the blood can build up in the surrounding tissue and cause painful swelling or inflammation. Endometriosis lesions and adhesions may also contribute to the deep pelvic pain associated with endometriosis. Therefore, pain in patients with endometriosis is due to uterine contractions and endometriotic lesions.⁸

Mari Kitamura et al. demonstrated a correlation between the severity of Premenstrual syndrome (PMS)/Premenstrual dysphoric disorder (PMDD) and dysmenorrhea in adolescents.⁹ Moderate/severe PMS is associated with lower overall health, excessive sleepiness or insomnia, anger, anxiety and depression. Research by Claire Hardy and Myra S. Hunter has shown that PMS is associated with poorer work-life balance, lower levels of resilience, higher perceived job demands, and less control over work.¹⁰

2.1.2 Clinical Manifestations

Lower abdominal pain is the main symptom of dysmenorrhea. The pain first appeared 12 hours before menstruation and was most severe on the first day of menstruation, often accompanied by paroxysmal cramps, ranging in duration, and subsided after 2 to 3 days. In severe cases, the pain can radiate to the vulva, anus, lumbosacral region, and inner thigh. Accompanied by cold limbs, pallor, cold sweats and other symptoms, and even nausea, vomiting, abdominal pain, diarrhea, dizziness and fatigue.¹¹

Currently, there are few international studies to describe and analyze working women's views and experiences of suffering from dysmenorrhea at work and how it affects their daily lives.

Previous studies have agreed that large numbers of women of different ages normalize their condition and do not seek medical care, in stark contrast to other studies that emphasize the negative impact of dysmenorrhea on women's quality of life. For working women, dysmenorrhea has an impact on work efficiency and productivity and is associated with absenteeism and attendance.

The reduced work efficiency caused by dysmenorrhea, the physical discomfort and psychological pressure caused by the pain of menstruation may be more concerning for these working women. According to a study by Ana Abreu-Sánchez et al. on the interference and impact of dysmenorrhea on the life of nursing students.

In terms of the intensity of dysmenorrhea and its impact on daily life, up to 62.8% of participants reported absenteeism due to dysmenorrhea. Participants with severe pain reported an average degree of interference in daily life, attention in class, during social activities, while practicing sport, during paid work, in family relations, and in their relationship with their partner. In terms of presenteeism, participants believed that they were acting more responsibly by attending classes and clinical internships when feeling unwell rather than being absent.¹² It should be noted, however, that nurse attendance in this setting may pose greater risks to patient health and safety, medication errors, reduced quality of care, and increased costs in these settings.¹³ Additionally, previous studies have reported that while dysmenorrhea limits women's daily lives, it is not considered a problem for health care providers and society. The experiences of these working women suffering from dysmenorrhea at work need to be described and analyzed to help implement recommendations to address the perceived needs of women with dysmenorrhea, in order to alleviate some of the gendered disadvantages that women experience in the workplace.

3.0 Methods

3.1 Survey Design

This study followed a survey design and was conducted using an online survey tool with close-ended questions and open-ended questions. The purpose of the study was to understand the life experiences of those who experienced menstruation while at work. Respondents work in different scopes, consisting of corporate white-collar workers and factory workers. Respondents feel differently about working during menstruation due to different job content, which allows understanding the health status of women affected by dysmenorrhea from different job positions.

3.2 Participants

The final sample included 167 responses to the survey. The participants work in China. 115 respondents were in white-collar occupations or researchers, and the remaining 52 respondents were workers in electronics factories. 100% of respondents identified as cisgender women. (Some transgender men can experience menstruation and dysmenorrhea, but in this survey, there were no such respondents, therefore these individuals are not considered further in this essay.) Participants ranged in age from 18 to 40, with most participants between the ages of 25 and 35. The educational level of the participants included middle school, high school, and college.

3.3 Data Collection

Participants were asked to describe their gender, age, occupation, and workplace. Interviews and an online survey asked participants to describe their experiences of menstruation at work. On the ability to manage menstruation at work and discuss dysmenorrhea at work, as well as comments on ways to improve dysmenorrhea, such as the implementation of dysmenorrhea leave. These questions gave respondents an opportunity to describe what they do at work to manage menstruation.

3.4 Data Analysis

A qualitative thematic analysis of the interview and the survey was carried out:

1. Reading: Developing an Intimate Relationship with the Data
2. Coding: Identifying the Emerging themes
3. Displaying Data:Distinguish Nuances of A Topic
4. Data Reduction: Getting the Big Picture
5. Interpretation

4.0 Findings

All respondents experienced menstruation, of which 92% experienced dysmenorrhea. In addition, 62% of respondents reported having a gynecological disorder. Among these respondents, the most frequently reported health conditions were menorrhagia (47%), irregular periods (40%), and endometriosis (13%).

Respondents' menstrual health experiences at work can be broken down into three main areas:

1. Managing painful and leaky bodies
2. Lack of access to facilities
3. Menstrual stigma and menstrual discrimination

Respondents reported spending a lot of time and effort managing menstrual symptoms at work, particularly pain and leakage. Respondents reported experiencing varying degrees of discrimination at work. This discrimination come from colleagues and from their own bosses. In addition, there are many out of a lack of understanding of the physiology of women who experience dysmenorrhea:

"I had a really bad experience with my former colleagues. I told them I had dysmenorrhea. They even bet me on the day I came and the day I didn't. Really bad experience."

"My HR told me that although you have brought a lot of positive effects to the team, we cannot renew your contract. But I do the exact same job as everyone else, and I am very productive, and we are the same in stats."

One respondent stated that because of endometriosis, her menstrual pain was unbearable, and her illness caused her to suffer discrimination from her supervisor in the workplace, and she lost her job due to this condition. When looking for a new job, her friends reminded her not to mention her illness to her boss, otherwise she would not find a job:

"My boss decided not to renew my contract because he was sick of women who were getting sick every month."

When asked if they would mention dysmenorrhea in the workplace, many respondents said they would not, for the following reasons:

"Talking about dysmenorrhea at work is, in a way, a sign of weakness. That's why women are reluctant to talk about dysmenorrhea at the same time. If they tell others that they feel uncomfortable every month, they are telling them that they It's less productive and less productive at some point a month, so it's risky and not every woman wants to take it."

Respondents indicated that during menstruation, in addition to work, they also worry about the inconvenience caused by menstruation during work. These conditions have brought a lot of psychological pressure to them.

Three female workers in an electronics factory in Shenzhen said:

"Our daily job is to pack and label mobile phones, and work standing up for about eight to ten hours. If it happens to be menstruation, it will be very hard, especially two days after menstruation begins. Menstrual cramps are the worst. During menstruation, the number of visits to the toilet will also increase. However, it is difficult to have time to go to the toilet when going to work. Two employees on the same production line cannot ask for leave at the same time, and the same production line has only We have two or three leave-off certificates. Sometimes we are too embarrassed to go to get the leave-off certificates. We have to go to the toilet every time. We

usually go to the toilet when we take a break. Only during this time can we go to the toilet freely, and there are a lot of people in the toilet, which makes us very stressed during this time."

"Standing work is very busy, and if you have your period, it will be very hard. You have to stand for eight to ten hours and work non-stop, not only that, but also depends on the face of the supervisor. Our foreman is male, he does not understand some of the physiological conditions of women, when we want to lie down on the table and rest because of dysmenorrhea, the foreman will feel that we are loafing on the job."

"Few people ask for leave in the name of dysmenorrhea, and they only say that they are not feeling well. And asking for sick leave requires a medical record slip and a doctor's stamp. If you ask for personal leave, your salary will be deducted. Therefore, no one asks for leave even if they can."

"I think people who don't need menstrual leave are more competitive than people who do. Bosses will be more inclined to hire people who don't need menstrual leave, because they will feel that they are more beneficial to the company."

Overall, according to the reports of respondents, those affected by dysmenorrhea may be discriminated against at work and refuse to discuss their discomfort with colleagues and supervisors. Due to their lack of understanding of the physiological condition of dysmenorrhea, as well as the teasing of colleagues, the interviewees also endured the discomfort and worked hard to overcome the pain and continue to work. In addition to being discriminated against and managing their pain and fatigue at work, the inconvenience at work due to physiological changes during menstruation also contributed to respondents' concerns and increased their psychological stress. There are also the effects of mood and behavioral changes during the menstrual cycle.

In the online survey, I also set up a question asking participants about their views of

menstrual leave. When it comes to menstrual leave, respondents have mixed reviews about menstrual leave. Some respondents agree with menstrual leave and believe that when women are not feeling well, they have the right to apply to the company for rest. Some respondents working in electronics factories expressed opposition to menstrual leave. Although they experience pain, fatigue and psychological stress at work due to dysmenorrhea symptoms, they believe that if menstrual leave is implemented, it will have a negative impact on those who need it, because it will reduce their competitiveness with those who do not have dysmenorrhea symptoms. They believe their superiors will find people who don't need menstrual leave more productive and more likely to hire them for the company.

There are limitations in this study. First, since the respondents were all born biologically female, the findings in this essay did not address the impact of dysmenorrhea on people who experience menstruation in their workplace other than biological female. Second, there are potential recall bias in the respondents' descriptions of their experiences of having dysmenorrhea at work.

Table 1. Three Barriers Encountered by Menstruating Employees

Barriers	Examples
Managing the painful and leaky body	Fatigue, leakage of menstrual blood on clothes and chairs, working through pain, increased mental stress
Lack of access to facilities	Insufficient toilet facilities and lack of time to use toilets
Managing menstrual stigma and discrimination	Avoid purposeful discussions about menstruation, fear of being laughed at, fear of being fired, difficulty in obtaining employment

5.0 Discussion

5.1 Implications for Individuals Who Experience Dysmenorrhea

Based on the results of the online survey, dysmenorrhea is highly prevalent in women. However, most of them choose to endure the pain and normalize its symptoms. It is important to emphasize that the essence of dysmenorrhea is a pathological symptom which requires timely treatment, otherwise, it can seriously affect women's work and life and cause harm to their health. Only a small number of women will seek medical treatment for dysmenorrhea due to their severe symptoms. In the United States, up to 86% of women with dysmenorrhea do not seek health care from a clinician. Research by Chen X. Chen et al. discloses that assuming symptoms are normal and preferring to self-manage symptoms are the main reasons why women do not seek medical care for dysmenorrhea.¹⁴ In addition, having limited resources, being unaware of treatment options, being wary of available treatments, and feeling embarrassed or afraid to seek care are also reasons why women do not seek medical care for dysmenorrhea.

Improving individuals' awareness of menstruation and menstrual pain, enhancing women's knowledge of menstruation and dysmenorrhea, and strengthening women's awareness of their rights and interests can help reduce the impact of dysmenorrhea on work for women in the workplace. Removing the stigma of menstruation, which limits women's behavior and harms their well-being, is also an important step in encouraging women to seek health care and improving women's occupational health and wellbeing.¹⁵

5.2 Implications for Employers

Menstrual-related symptoms can lead to significant loss of productivity. Loss of productivity due to menstrual-related absenteeism is prevalent in the general female population. Mark E. Schoep et al. study shows that menstruation-related symptoms (MRSs) accounted for 24% of the total absenteeism rate among women at work and study. The annual lost productivity due to attendance is seven times the annual lost productivity due to absenteeism, with women under 21 years of age bearing the greatest burden. Symptom severity scores showed significant and strong associations with absenteeism and attendance. Thus, the advice to employers is to offer flexible workplace options or provide menstrual leave. During working days, when female employees have dysmenorrhea symptoms, they can directly choose to work from home, and female employees with severe symptoms can choose to take a rest. But for women who work on factory lines, offering flexible workplace options are more difficult to implement. The companies can set up facilities such as rest rooms and provide NSAIDs based on the number of female workers. For female employees with severe dysmenorrhea, the employer may permit them to have menstrual leave, and the number of days of leave could be negotiated according to the recovery of the employee.

5.3 Implications for Government Policy Makers

5.3.1 Menstrual Leave

Menstrual leave may benefit the health of individuals who experience menstrual cycle-related conditions such as dysmenorrhea, endometriosis, ovarian cysts and mood disorders.¹⁵ For

women who suffer from dysmenorrhea, menstrual symptoms can affect their daily life to varying degrees, making it more difficult to participate in normal activities. Instituting menstrual leave may give women the opportunity to speak up about their menstrual cycle-related health concerns and take time to recover or seek treatment.

From a medical point of view, the proponents say the following: Huang Qiuyun (Deputy Chief Physician, Department of Reproductive Health, Xiamen Maternal and Child Health Hospital): *Because of periodic uterine bleeding during menstruation, most people will experience pain in the waist and lower abdomen. There are very few people who are unable to work normally because of severe pain. , the vast majority of women are competent for daily work during menstruation. Companies with better conditions can consider women benefits more, and do not arrange for them to do heavy physical work during menstruation, requiring exposure to cold water. There are many ways to adjust the discomfort of women' s menstrual period. However, some menstrual pain caused by endometriosis and pelvic inflammation is a disease and cannot be compared with simple menstrual discomfort. I have also met people who roll on the floor with menstrual pain. Such women should take appropriate breaks during their menstrual period. When encountering such patients, the hospital will also provide her with some relevant certificates.*

Li Na (Director of Obstetrics and Gynecology, Zhongshan Hospital): *It is a good wish to have statutory leave during menstruation, but it lacks operability. Nearly 90 medical staff in our obstetrics and gynecology department are all women. Every day, three or four people are in menstruation. People who have menstruation have rested, and their work will be delayed.*

If women can take vacation during their period, I think all women should have this day off, not just those with dysmenorrhea. Because from a medical point of view, dysmenorrhea is undiagnosable, and the few people who suffer from severe pain can only be seen from the outside.

Moreover, after many women get married, dysmenorrhea will ease or disappear, so there is no uniform and continuous standard for dysmenorrhea. In addition, it is unfair for some women who are relatively early in menopause to have one day off because they do not have menstruation.

The ideal state is that the companies will give all women one day of "menstrual leave" every month, and don't fix the day, let the female employees and the companies control it by themselves, so that people who cannot work because of dysmenorrhea can rest, and they do not need to be in the menstrual period. Women on vacation get the treatment they deserve as women. This not only takes into account fairness, but also humaneness.

5.4 Potential Disadvantages of Menstrual Leave

While menstrual leave may benefit menstruating women in some ways, it can also bring unintended negative effects for them, such as perpetuating sexist and discriminatory attitudes, contributing to menstrual stigma and gender stereotypes, as well as intensifying the gender pay gap.

According to survey responses from female employees working in electronics factories, their male factory leaders do not approve of menstrual leave. Factory leaders expressed concern that employees may use menstrual leave to avoid work. It is difficult to determine whether employees have menstrual symptoms and dysmenorrhea symptoms, which might affect the implementation of menstrual leave.

Additionally, sexism and menstrual stigma can lead to more negative reviews of menstruating women than non-menstruating women. Menstruating women were considered by supervisors and peers more irritable and rated higher on adjectives associated with neuroticism

than non-menstrual women. Workers who use menstrual leave policies may experience more negative perceptions than workers who do not use menstrual leave. This can be explained by “benevolent sexism” that assumes women do not belong in the workplace.¹⁶ Therefore, sexist attitudes and beliefs may undermine the desire of women to alter existing gender power dynamics.

Discrimination and ignorance of menstruation by employers may result in the loss of capable and intelligent female employees. This is undoubtedly a loss for the company's efficiency. However, from the perspective of formulating policies, it is difficult to eliminate such prejudice and discrimination, which needs to be eradicated from the mainstream social viewpoint and the general environment.

5.4.1 Reduce Taxes and Expand Medical Coverage

According to a study by Sayako Akiyama et al., the overall health care costs of women with dysmenorrhea were significantly higher compared to similar women without dysmenorrhea. Similarly, the health care costs of women with dysmenorrhea were two to three times that of women without dysmenorrhea, with excess charges primarily driven by outpatient care. In Japan, patients affected by dysmenorrhea see a doctor more frequently, roughly equivalent to one additional doctor visit every 45 days. This high frequency indicates that dysmenorrhea has a large impact on the patient's quality of life. In some circumstances, dysmenorrhea requires hospitalization, with about 6 in 100 patients hospitalized for dysmenorrhea within 12 months.¹⁷

In the United States, more women than men live in poverty. Of the 38.1 million people living in poverty in 2018, 56 percent, or 21.4 million, were women, according to the U.S. Census Bureau. Menstrual products are expensive and in a study by Anne Sebert Kuhlmann et al., nearly two-thirds (64%) of 183 low-income women in St. Louis, Missouri, were unable to afford the

menstrual hygiene products they needed in the previous year. Many women use only cloths, wipes, tissues, or toilet paper as their menstrual supplies.¹⁸

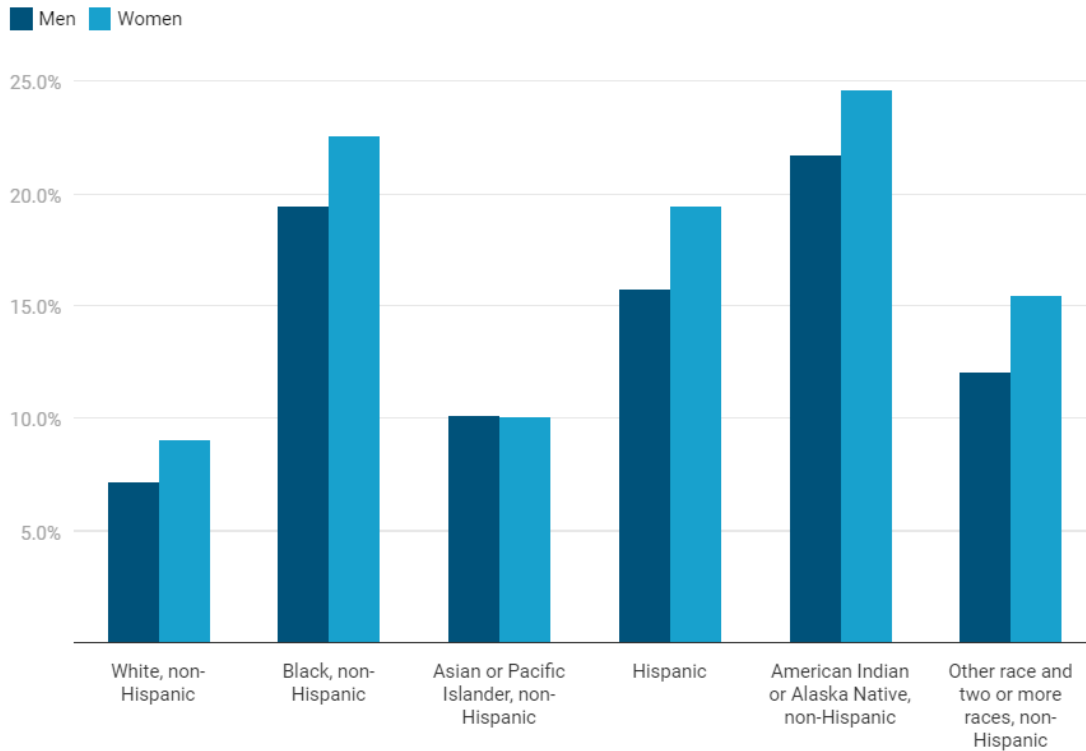


Figure 1. Poverty Rates by Gender and Race and Ethnicity

Steven Ruggles et al, "Integrated Public Use Microdata Series, 2019 Current Population Survey, Annual Social and Economic Supplement"
<https://www.americanprogress.org/article/basic-facts-women-poverty/>, AUG 3, 2020

Menstrual supplies are essential for women of menstrual age, however government benefits such as the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) do not cover the cost of these essentials. Women need to pay high costs for the treatment of dysmenorrhea and the purchase of menstrual products. However, a large number of women living in poverty are unable to pay these

costs, which leads them to choose not to seek medical resources, but to endure dysmenorrhea symptoms and a lack of suitable menstrual products.

Governments need to introduce corresponding policies and provide financial support to reduce the burden of menstruation on low-income women. They need to provide more health care services, such as reducing or abolishing the levy on menstrual products. In addition, they have to increase medical coverage, including dysmenorrhea treatment into medical insurance, ensuring that women in poverty no longer disproportionately suffer from it, thereby reducing the impact of dysmenorrhea on women's quality of life and overall well-being.

6.0 Conclusion

This survey-based study demonstrates the enormous challenges faced by those who manage dysmenorrhea at work. Respondents reported a range of difficulties that presented significant challenges to their employment, work productivity, and mental health. Many companies ignore, fail to understand, or discriminate against working women with menstrual dysmenorrhea, who experience reduced productivity and special physiological conditions, by focusing on performance goals known to lead to negative health outcomes that are disproportionately borne by women. The work environment, built-in stigma, and aching bodies combine to create additional labor for respondents.

Appendix A : Survey Questions

1. What is your age?

2. What is your sex?

Female

Intersex

Others

3. What is your gender identity?

Female

Male

Non-binary

4. What is your occupation?

5. What is your educational level?

Less Than a High School Education

High School Graduate

Some College

Associate's Degree

Bachelor's Degree

Graduate or Professional Degree

Others

6. What does your workplace look like? (Describe your work environment)

7. Do you have dysmenorrhea?

- Yes
- No

8. What is the level of pain you feel?

- No pain
- Mild pain (Have a sensation of pain, but it does not affect daily life, work is rarely affected, no systemic symptoms, and seldom use painkiller)
- Moderate pain (Daily life and work are affected, have systemic symptoms and require painkillers)
- Severe pain (Unbearable pain. Daily life and work are strongly affected, systemic symptoms are severe, and the effect of painkillers is not obvious)

9. Do you think your dysmenorrhea is primary dysmenorrhea or secondary dysmenorrhea?

- Primary dysmenorrhea
- Secondary dysmenorrhea
- Not sure

10. Do you have endometriosis?

- Yes
- No

11. Do you have menorrhagia?

- Yes
- No

12. Do you have irregular menses?

- Yes
- No

13. What do you think are the main causes of your dysmenorrhea? [Multiple Choice]

- Genetic factors
- Diet
- Sleep disorders
- Stress
- Environmental factors
- Others

14. How is your experience of dysmenorrhea at work? How do you manage menstruation and dysmenorrhea at work?

15. What are the problems and barriers you experience when having dysmenorrhea during work?

16. Do you consider dysmenorrhea can be healed on its own?

- Yes
- No

17. Do you regularly go to hospital to get treatment for dysmenorrhea?

- Yes
- No

18. Have you ever felt resistant or afraid to take painkillers? Why?

- Yes
- No

19. How do you feel about menstrual leave?

20. Will you take menstrual leave?

- Yes
- No

21. Why do you want (or don't want) to take menstrual leave?

22. Has dysmenorrhea caused difficulties in your employment?

- Yes
- No

23. Have you ever experienced employment discrimination for dysmenorrhea?

- Yes
- No

24. Has dysmenorrhea ever impacted your attendance?

- Yes
- No

25. Have you ever experienced menstrual stigma and menstrual discrimination from your colleagues or supervisors?

- Yes
- No

26. Have you ever mentioned your dysmenorrhea in your workplace?

- Yes
- No

27. Will you mention your dysmenorrhea in your workplace?

- Yes
- No

28. What are your colleagues' and supervisors' attitudes toward your dysmenorrhea?

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