Investigative Research on Menstruation and Menopausal Related Disorders That Affect the Quality of Working Life (QWL)

Field name "Medical care for working women"

The results of a questionnaire regarding the influence of menstrual pain or menopausal disorders on the Quality of Working Life (QWL) for women administered to 2,045 subjects showed that 77% of working women reported menstrual pain (Fig. 36) and 37% of those reported the need for painkillers (Fig. 37). We found that menstrual pain and premenstrual syndrome significantly decrease the QWL, and that 24% of women age 20 to 60 suffer from menopausal disorders that significantly decrease the QWL [1, 2].
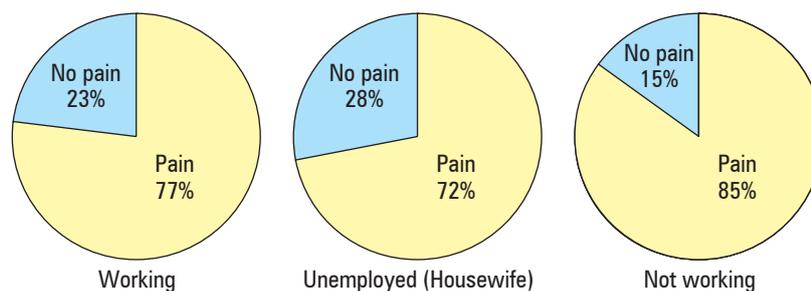

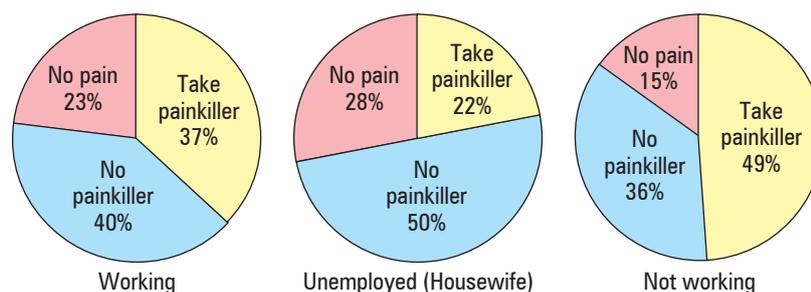**Fig. 36. Presence of mentstrual pain based on working status**

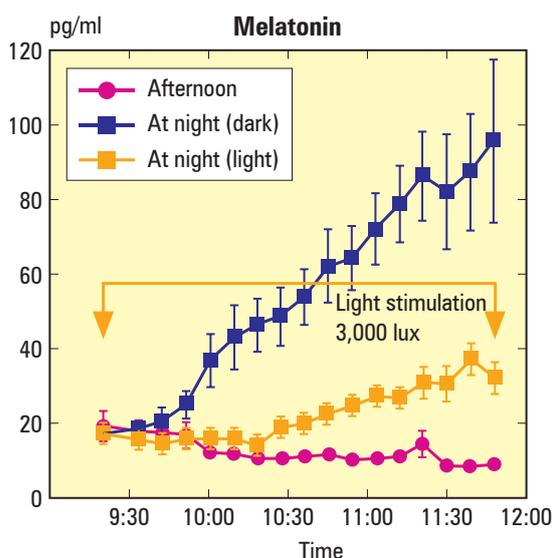**Fig. 37. Use of painkiller during mentstrual period based on working status**

References:
1) Yamoto M., et al.: Research, development, and dissemination on the relationship between women's diseases and employment status and that between women's diseases and work content, Research report, The Japan Labour Health and Welfare Organization, Clinical Research Center for Working Women's Health, 2008.
2) Yamoto M.: Investigative research on menstruation and menopausal related disorders that affect the Quality of Working Life (QWL), The Japan Labour Health and Welfare Organization, Clinical Research Center for Working Women's Health, 2008.

Investigative Research on Effect of Late Night and Long Work Hours on Women's Endocrine System

Field name "Medical care for working women"

In the investigation of the influence of late night and long working hours on the endocrine system of women, in order to clarify the mechanism of why there are many cases of irregular menstrual cycles for those that work late at night, we studied the change in the endocrine hormones in nurses who work at night. Darkness at night causes the melatonin level to increase, and we identified that since the nurses work in a lighted workspace there is no increase in the melatonin level [1, 3, 4] (Fig. 38).

Melatonin

(Graph legend)
- Afternoon
- At night (dark)
- At night (light)

Light stimulation 3,000 lux

pg/ml (y-axis): 0, 20, 40, 60, 80, 100, 120
Time (x-axis): 9:30, 10:00, 10:30, 11:00, 11:30, 12:00

Melatonin
Melatonin is a hormone that is secreted from the pineal body. The function of melatonin is to constrict the melanophore and suppress the growth of the gonads. In addition, the melatonin secretion capacity usually increases in people at night, and it is thought that this promotes sleep.

Fig. 38. Influence of light stimulation on melatonin in the blood

References:

3) Miyauchi F.: Research on the influence of late night and long working hours on women's endocrine system - Toward clarifying the influence on hormone secretion in working women. The Japan Labour Health and Welfare Organization, Clinical Research Center for Working Women's Health, 2007.
4) Miyauchi F.: Research on the influence of late night and long working hours on women's endocrine system - Toward clarifying the influence on hormone secretion in working women (Part 2). The Japan Labour Health and Welfare Organization, Clinical Research Center for Working Women's Health, 2008.

11-3

Development of Model System for Women Outpatients

— Report Based on Questionnaires Submitted to Female Outpatients —

Field name "Medical care for working women"

We administered a questionnaire regarding a female outpatient model system. We analyzed 549 responses and found that diseases afflicting the women that received consultation covered an extremely wide range of diseases related to obstetrics and gynecology, psychiatry, internal medicine, urology, mammary glands, and proctology. We found that there were 158 diagnosed diseases, and clarified the fact that many of the working women continued to work while coping with the pain and the importance of female outpatients (Table 14).

In terms of the construction of a female outpatient model system, these results showed that the attending physicians need "comprehensiveness" when dealing with such a wide range of diseases [1, 5].

Furthermore, 58.4% of the women believe that stress at the workplace and home is a contributing factor to the onset of symptoms that are the reason for them to seek consultation.

Table 14. Summary of the number diagnosed diseases for female outpatients

Obstetrical and gynecological diseases	32
Psychiatric diseases	18
Other diseases	
Internal medicine	84
Urology	8
Mammary gland / proctology	16
Total	158

* Total number of diagnosed diseases was 158

References:

5) Tatsuta H.: Development of model and system for women outpatients - Report based on questionnaires submitted to female outpatients. The Japan Labour Health and Welfare Organization, Clinical Research Center for Working Women's Health, 2008.

* Reference 1 can be viewed at **http://www.research12.jp/h13/index2.html**, a site dedicated to the research and development, and dissemination projects related to the 13 fields of occupational injuries and illnesses.

* References 2, 4, and 5 can be viewed at **http://www.research12.jp/h13/index.html**, a site dedicated to the research and development, and dissemination projects related to the 13 fields of occupational injuries and illnesses.