



SPECIAL ARTICLE

Dysmenorrhea in Japanese women

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In view of the fact that dysmenorrhea, whether it is primary or secondary, causes considerable medical and social problems, the prevalence of dysmenorrhea in Japan was studied in relation to age and parity, which are empirically suspected determinants of dysmenorrhea. Although the use of oral contraceptives is another well-known alleviating factor of dysmenorrhea [1], it was not evaluated in our study because the usage is uncommon in Japan (~2%).

A comprehensive questionnaire asking age, parity, severity of dysmenorrhea [2] and absenteeism was sent by mail to 10,000 women who were randomly selected in 100 districts that were randomly chosen based on a geographical location and population size so that they could be representative of the whole Japanese female population. Though some biases might affect the response, which was on the voluntary basis, 4191 questionnaires were returned, of which 3941 were eligible for the present analysis.

Overall, 21.5% of women do not suffer from dysmenorrhea at all, and 46.0% of women suffer from mild dysmenorrhea, which seldom requires analgesics. More severe dysmenorrhea, which usually requires analgesic use, was complained of in about one third of the women, among which 18.3% described that their daily activity was virtually inhibited due to dysmenorrhea.

Fig. 1 demonstrates the proportion of women with dysmenorrhea that usually requires analgesic use. The prevalence of dysmenorrhea decreases

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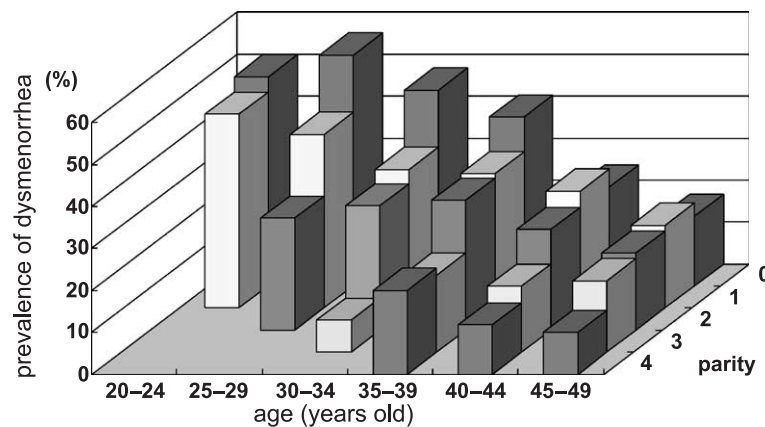


Figure 1 Proportion of women with dysmenorrhea that affects daily activities. Data analyzed with two-dimensional stratification with age and parity.

with increasing age and parity, though the tendencies are obscure in multiparous or higher age groups. The Mantel-Haenszel statistic revealed that increasing parity was associated with decreasing prevalence of dysmenorrhea, even after adjustment with ages, and that increasing ages was associated with decreasing prevalence of dysmenorrhea, even after adjustment with parity.

The precise mechanism that can explain the observed association of age and parity with dysmenorrhea remains unknown at present. Primary dysmenorrhea may be reduced in parous women in view of the finding that adrenergic nerves that innervate myometrial smooth muscle cells disappear almost completely during pregnancy but regenerate only partially after delivery [3]. Another possible explanation for a lower incidence of dysmenorrhea in parous women is that endometriosis, a major cause of secondary dysmenorrhea, reduces fertility.

A total of 27.3% of women were absent from work or school for at least a part of a day in the last 6 months. Dysmenorrhea-associated absenteeism from work seemed to have a considerable socio-economic impact, thus pointing to government-initiated management of dysmenorrhea.

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