Dysmenorrhea among Siriraj nurses; Prevalence, Quality of Life, and Knowledge of Management

Kunyarat Chuamoor BN*,
Kanya Kaewmanee BSc*, Prasong Tanmahasamut MD*

* Department of Obstetrics and Gynecology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand

Objective: To determine the prevalence of dysmenorrhea, impact on daily activity, quality of life, and knowledge of management among Siriraj nurses.

Subjects: Four hundred ninety three female nurses in the Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand.

Material and Method: A cross-sectional descriptive study was done at Siriraj Hospital, Bangkok, Thailand. Subjects were asked to complete a questionnaire (32 items) and a Short form-36. The questionnaire included demographic data, menstrual pattern, age at dysmenorrhea, severity of dysmenorrhea, pain score, impact of dysmenorrhea on daily activity, and method and knowledge of medications to treat dysmenorrhea. Evaluation of the quality of life using short form-36 questionnaire was also asked.

Results: The prevalence of dysmenorrhea was 70.2%. The prevalence of mild, moderate, and severe dysmenorrhea was 29.6%, 38.9%, and 1.6% respectively. Dysmenorrhea was significantly associated with age of participants, amount of menses, and the family history of dysmenorrhea. Nurses who had moderate to severe dysmenorrhea reported the impact on daily activities as limited sport activity (93%), limited social activity (66%), affected their concentration (81%), and absenteeism from work (16.5%). The mean total score of short form-36 in moderate and severe dysmenorrhea group was 69.9, significantly lower than mild and no dysmenorrhea group (75.2). Eighty-one percent and 68% of nurses with moderate and severe dysmenorrhea used paracetamol and mefenamic acid for pain relief, respectively.

Conclusion: The prevalence of dysmenorrhea among nurses was high and it had a negative impact on daily activities and quality of life. Most of the subjects knew that paracetamol and mefenamic acid can relieve dysmenorrhea. The hospital administrators should be concerned with this problem in nurses working in their hospital.

Keywords: Dysmenorrhea, Quality of life, Nurses, Prevalence

Dysmenorrhea is a common symptom among reproductive age women, with a prevalence of 53 to 90%[1-9]. Dysmenorrhea is commonly divided into primary and secondary dysmenorrhea. Primary dysmenorrhea happens a few years after menarche when ovulatory cycles are established. Secondary dysmenorrhea defined as pain that occurs due to gynecologic pathology, which usually occurs years after menarche and can occur with anovulatory cycles[10].

Variations in the definition of dysmenorrhea make it difficult to determine prevalence precisely. Several studies tend to report on prevalence in female adolescences and type of dysmenorrhea is not always specified. Adolescent girls tended to have a higher prevalence of primary dysmenorrhea than older women. The reasons for this are primary dysmenorrhea improves in the third decade of a woman's reproductive life, and is reduced after childbirth[7,11]. Therefore, the results from prevalence studies of adolescences may not always be extrapolated to older women. Dysmenorrhea is also associated with high degree of school and work absenteeism and limitation on social, academic, and sport activities, especially in moderate to severe dysmenorrhea[1,2,5-9,12,13]. It is a public health problem because of its high prevalence, the degree of discomfort felt by the sufferers, and considerable economic losses to the community[1,3,4,6,8,9].

As there are few studies of dysmenorrhea among adult women and no previous study in adult Thai women, this cross-sectional study was conducted to determine the prevalence of dysmenorrhea, quality

Correspondence to:

Tanmahasamut P, Department of Obstetrics and Gynecology, Faculty of Medicine Siriraj Hospital, 2 Prannok Rd, Bangkoknoi, Bangkok 10700, Thailand.
Phone: 0-2419-4657, Fax: 0-2419-4658
E-mail: prasong.tan@mahidol.ac.th

of life, impact on daily activities and knowledge of treatment in Thai female nurses.

Material and Method

The present study was conducted between October 2010 and March 2011 at Siriraj Hospital, Bangkok, Thailand. The subjects were nurses in Siriraj Hospital. The subjects were sampling from the outpatient department and inpatient wards in each department.

The present study was approved by the Siriraj Institutional Review Board. All participants obtained the information about research methodology and two questionnaires.

The questionnaires were handed out by researchers. There were two questionnaires. The first one was composed of demographic data, menstrual pattern, severity of menstrual pain, impact of dysmenorrhea on daily activity, work, sport, and social activities and the knowledge of pain relief and medications use. The other one is "short form-36 (SF-36) Thai version 2"[14,15], which is a questionnaire for evaluation the health related quality of life (HRQoL) in physical, mental, and psychosocial aspect.

The severity of dysmenorrhea was classified by multidimensional scoring system and linear visual analogue scale (VAS)[16]. Multidimensional scoring system classified the severity of dysmenorrhea as mild, moderate, and severe based on pain, limited activities, and medication taken. Mild dysmenorrhea defined as mild menstrual pain that seldom inhibits normal activity and analgesics are seldom required. Moderate dysmenorrhea defined as moderate menstrual pain that affects daily activity and requires analgesics that give sufficient relief so that absence from work is unusual. Severe dysmenorrhea defined as severe menstrual pain with vegetative symptoms such as headache, fatigue, vomiting, and diarrhea that inhibits daily activity, and analgesics has poor effect on pain relief. Pain score was assessed using a 10-cm VAS, the left ended side of which indicates the absence of pain and the right one pain as much as it could be. The participants were asked to rate the degree of pain by making a mark on the line. Pain score measured the distance from zero to that mark using a ruler with a minimum measuring unit of one mm.

The data were analyzed using SPSS for windows version 14. The categorical data were analyzed by Chi-square or Fisher exact test. The continuous data were analyzed using unpaired t-test or one-way analysis of variance (ANOVA) as appropriate. All tests were two-tailed and a $p < 0.05$ was considered to indicate a statistically significant difference. Forward stepwise multiple logistic regression analysis was applied to identify important risk factors for dysmenorrhea.

Results

The questionnaires were distributed to 517 selected female nurses in Siriraj hospital. Four hundred ninety three questionnaires were completed. The collected data was about 95.4% of total female nurses. Mean age of participants was 30.8 ± 7.5 years old (range 21 to 53 years old). The prevalence of dysmenorrhea was 70.2%. The prevalence of mild, moderate, and severe dysmenorrhea were 29.6%, 38.9%, and 1.6% respectively. Almost 90% of nurses with dysmenorrhea and 81% of those without dysmenorrhea had regular menstruation ($p = 0.001$). Two hundred fifty three nurses (73.1%) reported that dysmenorrhea occur within five years post-menarche and ninety-three nurses (26.9%) reported that dysmenorrhea occur after five years post-menarche. The latter group may be defined as secondary dysmenorrhea.

The mean pain scores in mild, moderate, and severe group were 2.2, 5.6, and 9.1 respectively and significantly correlate with the severity (Table 1).

Table 2 shows comparison between the two groups with regard to demographic data and various factors. Mean age of participants, marital status, parity, body mass index (BMI), duration and amount of menses, sexual activity, and the family history of dysmenorrhea were significantly different.

Table 3 presents the adjusted Odds ratio of dysmenorrhea based on multivariate regression analysis with regard to demographic data and various factors. Dysmenorrhea was significantly associated with age of participants, amount of menses, and the family history of dysmenorrhea.

Table 1. Severity of dysmenorrhea and mean pain score

	n	Pain score*
Mild dysmenorrhea	146	2.2 ± 1.1
Moderate dysmenorrhea	192	5.6 ± 1.5
Severe dysmenorrhea	8	9.1 ± 1.7

Data are presented in number (%) and mean ± SD
* One-way ANOVA, $p < 0.001$
All pairwise significant at $p < 0.001$ by Bonferroni multiple comparison

Table 2. Demographic data

Demographic data	No dysmenorrhea (n = 147)	Dysmenorrhea (n = 346)	p-value
Mean age (year)	33.4 ± 8.7	29.7 ± 6.7	<0.001*
Age			<0.001**
21-25 (n = 159)	35 (22%)	124 (78%)	
26-30 (n = 120)	33 (27.5%)	87 (72.5%)	
31-35 (n = 96)	27 (28.1%)	69 (71.9%)	
36-40 (n = 48)	10 (20.8%)	38 (79.2%)	
40-45 (n = 37)	22 (59.5%)	15 (40.5%)	
46-50 (n = 33)	20 (64.9%)	13 (35.1%)	
Marital status			0.014**
Single	104 (70.7%)	282 (81.5%)	
Married	37 (25.2%)	60 (17.3%)	
Divorced	5 (3.4%)	2 (0.6%)	
Widow	1 (0.7%)	2 (0.6%)	
Parity			0.010**
0	117 (79.6%)	306 (88.4%)	
1	23 (15.7%)	17 (4.9%)	
2	7 (4.8%)	18 (5.2%)	
3+	0 (0%)	5 (1.5%)	
Mean BMI (Kg/m^2)	21.7 ± 4.0	20.8 ± 3.3	0.008*
BMI (Kg/m^2)			0.005**
< 18.5 (n = 111)	30 (9.9%)	81 (90.1%)	
18.5-22.9 (n = 272)	73 (26.8%)	199 (73.2%)	
23-24.9 (n = 46)	17 (37%)	29 (63%)	
≥ 25 (n = 60)	26 (43.3%)	34 (56.7%)	
Age at Menarche (year)	13.1 ± 1.5	13.0 ± 1.5	0.870*
Interval (days)	29.6 ± 4.8	29.8 ± 7.1	0.738*
Duration (days)	4.3 ± 1.3	4.7 ± 1.4	0.007*
Amount of menses (number of pad/day)	3.2 ± 1.1	3.6 ± 1.4	0.003*
Family history of dysmenorrhea	35 (23.8%)	188 (54.3%)	<0.001**
Progression of dysmenorrhea			
No	NA	169 (48.8%)	
Increase	NA	86 (24.9%)	
Decrease	NA	91 (26.3%)	
Sexual intercourse	57 (38.8%)	100 (28.7%)	0.035**
Dyspareunia	15 (26.3%)	34 (34%)	0.318**
Exercise	114 (77.6%)	267 (77.2%)	0.926**
Smoking	0 (0%)	4 (1.2%)	0.425**
Coffee consumption	93 (63.3%)	233 (67.1%)	0.417**
Alcohol consumption	28 (19.0%)	63 (18.2%)	0.826**
Working time			0.016**
Daytime only	45 (30.6%)	71 (20.5%)	
3-shift cycle (day/evening/night shift)	102 (69.4%)	275 (79.5%)	

Data are presented in mean ± SD and number (%)
* Student t-test
** Chi-square test

Table 3. Multivariate analysis of demographic data

Demographic data	Adjusted odds ratio (95% CI)	p-value
Age (year)	0.95 (0.92, 0.98)	0.002
Marital status		0.566
Single	1.00	
Married	1.22 (0.45, 3.35)	
Divorced	0.38 (0.05, 2.97)	
Widow	2.19 (0.14, 33.59)	
Parity		0.560
0	1.00	
≥ 1	0.75 (0.29, 1.94)	
BMI (Kg/m^2)	0.97 (0.91, 1.03)	0.308
Duration of menses (days)	1.06 (0.90, 1.25)	0.476
Amount of menses (number of pad/day)	1.40 (1.15, 1.71)	0.001
Family history of dysmenorrhea	3.91 (2.47, 6.20)	<0.001
Sexual intercourse	0.93 (0.46, 1.87)	0.839
Working time		0.233
Day time	1.00	
Rotation	1.35 (0.82, 2.21)	

The associated symptoms are shown in Table 4. The most common symptoms associated with dysmenorrhea were back pain (57.2%), mood change (56%), abdominal discomfort (47.3%), and myalgia (46.2%).

The impact of dysmenorrhea on daily activities of affecting nurses is shown in Table 5.

Table 4. Associated symptoms

Symptoms*	n	%
Back pain	282	57.2
Mood change	276	56.0
Abdominal discomfort	233	47.3
Myalgia	228	46.2
Diarrhea	194	39.4
Fatigue	192	38.9
Abdominal pain	179	36.3
Edema	132	26.8
Anorexia	56	11.4
Nausea & vomiting	40	8.1
Headache	24	4.9
Increasing appetite	8	1.6

* More than one symptoms/nurse

Limitation of sports activity, concentration, social activity, and absenteeism from work were significantly affected nurses with moderate and severe dysmenorrhea (p < 0.05). In moderate and severe group, 93% and 81% of participants reported that their sport activities and concentration were affected respectively. In addition, 16.5% in this group was absenteeism from work.

Table 6 shows the HRQoL score. The mean physical, mental, and total score were significantly different between groups. The HRQoL scores in the moderate and severe group were significantly lower than those in the mild dysmenorrhea and no pain group.

Table 7 shows the management strategies for dysmenorrhea. The participants reported that they used multiple treatments to relieve their symptoms such as rest (87.2%), medication (86%), and heating-pad (60.2%). More than 80% of the participants took a rest and took medication to alleviate their symptoms. Table 8 shows knowledge of medication for dysmenorrhea. In the moderate and severe dysmenorrhea group, 81% and 68% of participants knew that paracetamol and mefenamic acid can relieve their pain. The present study found that the management strategies were not different between two groups. The most common medications used for dysmenorrhea were paracetamol and mefenamic acid. About

Table 5. Impact of dysmenorrhea on daily activities

Daily activities	Nurses with dysmenorrhea (n = 346)	Mild pain (n = 146)	Moderate and severe pain (n = 200)	p-value*
Absenteeism from work	35 (10.1%)	2 (1.4%)	33 (16.5%)	<0.001
Limited concentration	236 (68.2%)	74 (50.7%)	162 (81.0%)	<0.001
Limited sport activities	293 (84.7%)	107 (73.3%)	186 (93.0%)	<0.001
Limited social activities	188 (54.3%)	56 (38.4%)	132 (66.0%)	<0.001

Table 6. The severity of dysmenorrhea and mean SF-36 score (total score = 100)

	No or mild pain (n = 293)	Moderate or severe pain (n = 200)	p-value*
Physical score	73.5 ± 13.8	68.3 ± 15.6	<0.001
Mental score	72.2 ± 15.3	67.1 ± 15.6	<0.001
Total score	75.2 ± 14.2	69.9 ± 15.4	<0.001

Data were presented in mean ± SD
* Student t-test

Table 7. Management strategies for dysmenorrhea

Method	n	%
Rest	430	87.2
Medicine	424	86.0
Heating-pad	297	60.2
Exercise	53	10.8
Massage	50	10.1
Meditation	6	1.2
Yoga	26	5.3
Vitamin	13	2.6
Acupuncture	7	1.4
Spa	5	1.0

More than one methods/nurse

knowledge of medication, the number of nurses with moderate to severe dysmenorrhea who knew that mefenamic acid, ibuprofen and oral contraceptive pills can relieve dysmenorrhea is significantly higher than those with no and mild dysmenorrhea. Overall, 35 (10.1%) participants with moderate and severe dysmenorrhea consulted a physician and 11 participants were diagnosed as endometriosis.

Discussion

The present study showed a high prevalence of dysmenorrhea (70.2%) among Siriraj nurses, aged 30.8 ± 7.5 years old. The prevalence of dysmenorrhea among the same age group of women varied from 15.8-78.5%[7,12,13,17-19]. The factors accounting for this wide gap results among studies may include ethnic and sociocultural differences, and differences in study population and data collection methods. The finding in this study is consistent with the previous studies conducted in Japan by Osuga Y et al[7] and Nohara M et al[17] which reported the prevalence of dysmenorrhea among the same age group of woman was 78.5% and 78%, respectively. However, other studies found lower prevalence than the present study (15.8-54.7%)[12,13,18,19]. About the severity of pain, the present study found higher prevalence of moderate and severe dysmenorrhea than other studies (29.2-33.4%)[17,18]. This difference may be from difference in classification of dysmenorrhea and again differences in study population.

The authors found that the prevalence of dysmenorrhea in the present study was lower than the previous studies reported in a Thai population[3,8]. The explanation for this difference is these previous studies were conducted in a younger age group (about 16 to 19 years), which has a higher prevalence of primary dysmenorrhea. In addition, many previous studies determined that the prevalence of dysmenorrhea decreases with increasing age and after childbirth[7,9,18,20].

A number of demographic factors were significantly associated with dysmenorrhea including age, body mass index (BMI), marital status, parity, duration and amount of menses, shift work, and the family history of dysmenorrhea. However, on multivariate analysis, only age, amount of menses, and the family history of dysmenorrhea were significantly associated with dysmenorrhea. The present study found that nurses aged less than 40 had a significantly higher prevalence of dysmenorrhea than those aged more than 40. Many previous studies showed that the prevalence of dysmenorrhea decreases with increasing age[7,9,12,13,18,20]. The dysmenorrheal nurses have a larger amount of menstruation than those who have no dysmenorrhea. This finding is consistent with other previous studies[9,18].

Table 8. Knowledge of medication

	No pain and mild pain, n (%)	Moderate and severe pain, n (%)	p-value*
Paracetamol	219 (74.7%)	162 (81%)	0.129
Mefenamic acid	110 (37.5%)	136 (68%)	<0.001
Ibuprofen	6 (2%)	36 (18%)	<0.001
Oral contraceptive pill	4 (1.4%)	11 (5.5%)	0.018

More than one types/nurse
Data are presented in number (%)
* Chi-square test

The family history of dysmenorrhea was the important risk of dysmenorrhea (adjusted odd ratio = 3.91) as shown in other studies[9,20,21], and the finding of the present study is consistent with previous studies. The explanation for this may be related with behavior that is learned from the mother[22] and the fact that family history was shown to be a risk for related conditions such as endometriosis, which has already been shown to have a familial pattern[9,20].

Previous studies reported a higher prevalence of dysmenorrhea among women who worked on night shift or on other shifts when compared with those who worked regularly during the daytime only[23,24]. On the other hand, Chinese workers who worked in 3-shift cycle did not find any relation between shift work and dysmenorrhea, which is consistent with this study results[25].

The associated symptoms of dysmenorrhea are known to encompass a wide variety of physical and mental symptoms. Back pain and mood change was the most frequently reported complaint among nurses in the present study, followed by abdominal discomfort and myalgia that is quite similar to previous reports in Thailand[3,8]. However, these associated symptoms were different among several studies. In Turkey, Cakir M et al[2] reported that abdominal pain, backache, and depression were the common associated symptoms. Another study in Turkey reported by Ozerdogan N et al[20] found that the common associated symptoms were nervousness, breast tenderness, and arthralgia. An explanation is unclear, but the authors think the different symptoms were associated with the different race, culture, occupation, or nutrition. However, the health care providers should consider inquiring about these associated symptoms in conjunction with dysmenorrhea because these symptoms may be more debilitating.

The present study shows that limitation of sports activities was the major impact of dysmenorrhea, 73.3% in the mild group, and 93% in the moderate and severe group. The proportion of nurses with moderate and severe group who had limitation of sports activities is higher than those previous studies in Thai adolescences[3,8] and other countries[1,21].

The proportion of dysmenorrheal nurses whose daily activities was affected were significantly different between mild group and moderate-to-severe group, especially the impact on sport activity and concentration. Ten percent of dysmenorrheal nurses were absent from work that is consistent with the study from Singapore[12] and New Zealand[13]. The rate of absenteeism from work in the present study is lower than those in the study from Japan (27.3%)[7]. Not surprisingly, the rate of work absenteeism was significantly higher among nurses with moderate to severe dysmenorrhea (16.5%) than those with mild dysmenorrhea (1.4%).

About quality of life, the present study found that the average HRQoL scores in physical, mental, and total score were significantly different between mild dysmenorrhea group and moderate to severe dysmenorrhea group. Nurses with mild dysmenorrhea have higher HRQoL scores than those with moderate to severe dysmenorrhea. It was consistent with a previous study reported by Unsal A et al[9]. However, many confounding factors may be affected to quality of life in nurses, *i.e.*, work hard activities, sleepless, 3-shift cycle work.

About knowledge of management for dysmenorrhea, nurses with moderate and severe dysmenorrhea knew that mefenamic acid, ibuprofen, and oral contraceptive pills are such an effective treatment. It was significantly different between no and mild dysmenorrhea group and moderate to severe dysmenorrhea group. Although, these findings cannot be represented in the general population, improving health education program about dysmenorrhea may result in adequate pain relief and improving quality of life in general adolescents and women.

Of the dysmenorrheal nurses, only 10.1% consulted a physician for this problem. All were in the moderate and severe dysmenorrhea group. This low consultation rate was consistent with the result from the previous study in Thai adolescences reported by Tangchai K et al[8] (7.1%). However, it had lower consultation rate than others studies reported in the United States[1] (14%) and Iran (21%)[21]. Women may think that pain is a normal accompaniment to the menstrual cycle and fail to seek medical advice even when their symptoms are severe and incapacitating.

The authors found that endometriosis was diagnosed in 11 of 35 cases who consulted physicians. Given information was benefitial to Thai healthcare providers and hospital administers for considering health education about dysmenorrhea, prevention, and management of their symptoms.

Some limitations of the present study should be noted. The authors could not clearly differentiate between primary or secondary dysmenorrhea. Most of the participants with moderate and severe dysmenorrhea did not consult a physician. In addition, participants were asked to recall menstrual pain and other information, which may have led to recall bias. Some recall biases might have occurred when completing the questionnaire and SF-36. Misclassification of dysmenorrhea and its severity were minimized by clear explanation of the definitions to all participants. Because this is an anonymous study, the information on dysmenorrhea was obtained by self-report that may have resulted in under-reporting of the conditions and could not be validated. These findings may not be generalizable to the population with cultural and occupational differences.

In conclusion, dysmenorrhea is highly prevalent among female nurses and it limited their activities especially in moderate to severe dysmenorrhea. It also has negative effect on HRQoL and is an important cause of work absenteeism. In light of the public health importance of those social and daily activity limitations associated with dysmenorrhea, education of women as well as the general community is vital in ensuring that dysmenorrhea is no longer seen as a normal female experience.

References

1. Banikarim C, Chacko MR, Kelder SH. Prevalence and impact of dysmenorrhea on Hispanic female adolescents. Arch Pediatr Adolesc Med 2000; 154: 1226-9.
2. Cakir M, Mungan I, Karakas T, Girisken I, Okten A. Menstrual pattern and common menstrual disorders among university students in Turkey. Pediatr Int 2007; 49: 938-42.
3. Chongpensuklert Y, Kaewrudee S, Soontrapa S, Sakondhavut C. Dysmenorrhea in Thai secondary school students in Khon Kaen, Thailand. Thai J Obstet Gynaecol 2008; 16: 47-53.
4. Hillen TI, Grbavac SL, Johnston PJ, Straton JA, Keogh JM. Primary dysmenorrhea in young Western Australian women: prevalence, impact, and knowledge of treatment. J Adolesc Health 1999; 25: 40-5.
5. Loto OM, Adewumi TA, Adewuya AO. Prevalence and correlates of dysmenorrhea among Nigerian college women. Aust N Z J Obstet Gynaecol 2008; 48: 442-4.
6. Ortiz MI. Primary dysmenorrhea among Mexican university students: prevalence, impact and treatment. Eur J Obstet Gynecol Reprod Biol 2010; 152: 73-7.
7. Osuga Y, Hayashi K, Kobayashi Y, Toyokawa S, Momoeda M, Koga K, et al. Dysmenorrhea in Japanese women. Int J Gynaecol Obstet 2005; 88: 82-3.
8. Tangchai K, Titapant V, Boriboonhirunsarn D. Dysmenorrhea in Thai adolescents: prevalence, impact and knowledge of treatment. J Med Assoc Thai 2004; 87 (Suppl 3): S69-73.
9. Unsal A, Ayranci U, Tozun M, Arslan G, Calik E. Prevalence of dysmenorrhea and its effect on quality of life among a group of female university students. Ups J Med Sci 2010; 115: 138-45.
10. Rapkin AJ, Howe CN. Pelvic pain and dysmenorrhea. In: Berek JS, editor. Berek & Novak's gynecology. 14th ed. Philadelphia: Lippincott Williams & Wilkins; 2007: 505-40.
11. Sundell G, Milsom I, Andersch B. Factors influencing the prevalence and severity of dysmenorrhoea in young women. Br J Obstet Gynaecol 1990; 97: 588-94.
12. Ng TP, Tan NC, Wansaicheong GK. A prevalence study of dysmenorrhoea in female residents aged

15-54 years in Clementi Town, Singapore. Ann Acad Med Singapore 1992; 21: 323-7.

13. Pullon S, Reinken J, Sparrow M. Prevalence of dysmenorrhoea in Wellington women. N Z Med J 1988; 101: 52-4.

14. Leurmarnkul W, Meetam P. Development of a quality of life questionaire: SF-36 (Thai version). Thai J Pharm Sci 2000; 24: 92-111.

15. Leurmarnkul W, Meetam P. Properties testing of the retranslated SF-36 (Thai version). Thai J Pharm Sci 2005; 29: 69-88.

16. Andersch B, Milsom I. An epidemiologic study of young women with dysmenorrhea. Am J Obstet Gynecol 1982; 144: 655-60.

17. Nohara M, Momoeda M, Kubota T, Nakabayashi M. Menstrual cycle and menstrual pain problems and related risk factors among Japanese female workers. Ind Health 2011; 49: 228-34.

18. Patel V, Tanksale V, Sahasrabhojanee M, Gupte S, Nevrekar P. The burden and determinants of dysmenorrhoea: a population-based survey of 2262 women in Goa, India. BJOG 2006; 113: 453-63.

19. Ohde S, Tokuda Y, Takahashi O, Yanai H, Hinohara S, Fukui T. Dysmenorrhea among Japanese women. Int J Gynaecol Obstet 2008; 100: 13-7.

20. Ozerdogan N, Sayiner D, Ayranci U, Unsal A, Giray S. Prevalence and predictors of dysmenorrhea among students at a university in Turkey. Int J Gynaecol Obstet 2009; 107: 39-43.

21. Rostami M. The study of dysmenorrhea in high school girls. Pak J Med Sci 2007; 23: 928-31.

22. Widholm O, Kantero RL. A statistical analysis of the menstrual patterns of 8,000 Finnish girls and their mothers. Acta Obstet Gynecol Scand Suppl 1971; 14: Suppl-36.

23. Parry BL, Berga SL, Mostofi N, Sependa PA, Kripke DF, Gillin JC. Morning versus evening bright light treatment of late luteal phase dysphoric disorder. Am J Psychiatry 1989; 146: 1215-7.

24. Uehata T, Sasakawa N. The fatigue and maternity disturbances of night workwomen. J Hum Ergol (Tokyo) 1982; 11 (Suppl): 465-74.

25. Christiani DC, Niu T, Xu X. Occupational stress and dysmenorrhea in women working in cotton textile Mills. Int J Occup Environ Health 1995; 1: 9-15.

ภาวะปวดระดูในพยาบาล: ความชุก คุณภาพชีวิต และการดูแลรักษาอาการปวดระดูเบื้องต้น

กัญญารัตน์ เชื้อหมอ, กัญญา แก้วมณี, ประสงค์ ตันมหาสมุทร

วัตถุประสงค์: ศึกษาหาความชุกของภาวะปวดระดูในพยาบาล ผลกระทบของภาวะปวดระดูต่อกิจวัตรประจำวันและคุณภาพชีวิต และความรู้ในการดูแลภาวะปวดระดู

ชนิดของการทำวิจัย: การวิจัยเชิงพรรณนา

สถานที่ที่ทำวิจัย: โรงพยาบาลศิริราช กรุงเทพมหานคร ประเทศไทย

กลุ่มตัวอย่าง: พยาบาลหญิง ในโรงพยาบาลศิริราช จำนวน 493 คน

วัสดุและวิธีการ: พยาบาลที่ยินยอมร่วมการศึกษาวิจัย จะได้รับแจกแบบสอบถาม 2 ชุด ชุดที่ 1 ข้อมูลพื้นฐาน ประวัติระดู ระดับความรุนแรงของการปวดระดู ผลกระทบของภาวะปวดระดูต่อกิจวัตรประจำวัน และวิธีการบรรเทาอาการปวด ทั้งหมด 32 ข้อ ชุดที่ 2 แบบประเมินคุณภาพชีวิต (short-form - 36)

ผลการศึกษา: ความชุกของภาวะปวดระดูของพยาบาลคิดเป็นร้อยละ 70.2 โดยความชุกของกลุ่มที่มีอาการปวดเล็กน้อย ปานกลาง และรุนแรง คิดเป็นร้อยละ 29.6, 38.9 และ 1.6 ตามลำดับ พบว่าอายุ จำนวนวันที่มีระดู และประวัติคนในครอบครัวมีอาการปวดระดู มีความแตกต่างอย่างมีนัยสำคัญระหว่างกลุ่มที่มีอาการปวดระดูและกลุ่มที่ไม่มีอาการปวดระดู พบว่าอาการปวดระดูระดับปานกลางและรุนแรงมีผลกระทบต่อการทำกิจวัตรประจำวันและการทำงานค่อนข้างมาก โดยพบว่า ร้อยละ 93 ทำให้เล่นกีฬาน้อยลง ร้อยละ 66.6 ทำให้เข้าสังคมน้อยลง ร้อยละ 81 มีผลต่อสมาธิในการทำงานลดลง และร้อยละ 16.5 ต้องลาหยุดงาน คะแนนคุณภาพชีวิตเฉลี่ยของกลุ่มที่มีอาการปวดระดูปานกลางและรุนแรงเท่ากับ 69.9 ซึ่งต่ำกว่ากลุ่มที่มีอาการปวดเล็กน้อยและไม่ปวด ซึ่งมีค่าเท่ากับ 75.2 อย่างมีนัยสำคัญทางสถิติ ร้อยละ 81 และ 68 ของกลุ่มที่มีอาการปวดระดูระดับปานกลางและรุนแรงทราบว่ายาพาราเซตามอล และ mefenamic acid มีประสิทธิภาพในการบรรเทาอาการปวดได้ ตามลำดับ

สรุป: อาการปวดระดูมีความชุกสูงในพยาบาล และอาการปวดในระดับปานกลางและรุนแรงมากมีผลกระทบด้านลบต่อการทำกิจวัตรประจำวัน การทำงาน และคุณภาพชีวิต พยาบาลส่วนใหญ่ทราบว่ายาพาราเซตามอล และ mefenamic acid สามารถบรรเทาอาการปวดระดูได้ ผู้บริหารโรงพยาบาลควรใส่ใจกับภาวะปวดระดูในพยาบาลที่ปฏิบัติงานในโรงพยาบาล