

ADOLESCENT DISMENORE PREVALENCE IN WEST JAVA, INDONESIA: PRELIMINARY STUDY

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Abstract

Menstruation is an important life cycle for women. Many teenage girls experience pain during menstruation/dysmenorrhea. This often causes adolescent activities to be disrupted. The purpose of this study was to determine the prevalence of adolescent dysmenorrhea in West Java, Indonesia. The research design used is descriptive-analytic. The number of respondents who took part was 166 teenagers, in the West Java region. The results showed dysmenorrhea occurred in respondents as much as 98.8%, with a mean age of respondents 17.7 years, mean age of menarche 12.5 years. Dysmenorrhea often occurs at the beginning of menstruation (the first and second days of menstruation 83.13%), the pain is felt to disappear, dysmenorrhea affects the activity of respondents to be limited. How to handle dysmenorrhea done by respondents with rest/sleep as much as 56.6%. This research is a preliminary study, as a basis for conducting further research on how to effectively manage dysmenorrhea.

Keywords: adolescent girls, dysmenorrheal

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INTRODUCTION

Menstruation is an important event in a woman's life cycle. This shows that physical maturity in the form of maturity of the reproductive system has occurred in women. Some problems can be experienced by women every month during menstruation, one of which is dysmenorrhea [1][2][3][4].

Dysmenorrhea is the most common complaint in women, which is often reported. More than half of menstruating women experience pain for 1-2 days every month [5]. The incidence of primary dysmenorrhea peaks in late adolescence and early 20s, and decreases with age and with increasing parity [6][7]. Dysmenorrhea can affect more than 50% of menstruating women, and the reported prevalence varies greatly (for example, 45-95%) [7][8] [9][10][3][11][12].

Dysmenorrhea is the term medical for menstrual cramps, which are caused by uterine contractions or menstrual-related pain [5]. Dysmenorrhea is divided into two namely primary dysmenorrhea and secondary dysmenorrhea. Dysmenorrhea experienced by adolescents is generally not due to disease and is called primary dysmenorrhea. In older women, dysmenorrhea can be caused by certain diseases such as uterine fibroids, pelvic inflammation, endometriosis, or ectopic pregnancy. Dysmenorrhea caused by disease is called secondary dysmenorrhea [13].

Dysmenorrhea is not a disease but is a problem that periodically makes women uncomfortable during the menstrual cycle. Menstrual pain occurs mainly in the lower abdomen, but can spread to the lower back, waist, pelvis, upper thighs, until the calf, sweating, headache, nausea, vomiting, diarrhea, trembling [14]. Pain can also be accompanied by severe stomach cramps. Cramps are derived from uterine muscle contractions that are very intense when removing menstrual blood from the uterus.

This intense muscle contraction then causes the muscles to tighten and cause cramps or pain or tenderness [13]. Dysmenorrhea complaints generally affect daily physical activity, school attendance, concentration during class hours, academic performance both physically, emotionally, or socially, family relationships [6][15][16][17]. Absenteeism at work greatly affects company productivity if women experience dysmenorrhea. Dysmenorrhea is considered to have a direct negative impact on their quality of life [14]. This is often reported to occur in one-third of half of the dysmenorrhea sufferers. Therefore, dysmenorrhea is considered as an economic, health, and social burden for a country [4]. This study aims to determine the prevalence of adolescent dysmenorrhea in West Java, as a preliminary study.

METHOD

The research uses descriptive analysis design. This study aims to determine the knowledge and experience of adolescents about dysmenorrhea. The sampling technique was by simple random sampling, as many as 166 people, with inclusion criteria of adolescents aged 15-20 years, had menstruated, were willing to become research respondents. This research was conducted in the area of Bandung, Cimahi, Tasikmalaya, Banjar, West Java. Data collection by survey using a questionnaire. Data processing using univariate and bivariate analysis.

RESULTS AND DISCUSSION

Based on table 1, the average age of respondents experiencing dysmenorrhea complaints $17,789 \pm 1,297$ (with an age range of 15 years to 20 years). The average age at first menstruation/menarche is $12,524 \pm 1,319$ (with an age range of 9 years to 15 years).

Table 1. Characteristics Respondent

Characteristics	Results (n = 166)
Age (years)	17,789 ± 1,297
Age at first menstruation / Menarche (years)	12,524 ± 1,319

Based on table 2, 164 respondent late adolescents/ages 18-21 years as many as 92 (55.4%), the location of the pain is generally felt in the hip as many as 86 people (51.8%), felt severe pain 84 people (50.6%). Dysmenorrhea appeared at the beginning of menstruation / the first day and the second day of menstruation as many as 138 people (83.13%), the characteristics of pain that felt lost arise as many as 139 people (83.73%), the effect of dysmenorrhea on activity generally states that activity is limited to 65 people (39.2%), the actions taken during dysmenorrhea were rest/sleep as many as 94 people (56.6%).

Based on table 3, the age of adolescents is not related to the incidence of dysmenorrhea ($p = 0.113$). The pain location was related to dysmenorrhea ($p = 0.016$). Characteristics of perceived pain associated with the incidence of dysmenorrhea ($p = 0.0001$). Interrupted activity due to dysmenorrhea is associated with dysmenorrhea events ($p = 0.03$). The effect of dysmenorrhea on activity was not related to the incidence of dysmenorrhea ($p = 0.287$). Actions taken during dysmenorrhea were not related to dysmenorrhea events ($p = 0.949$). Based on table 4, the age of menarche is related to the experience/incidence of dysmenorrhea ($p = 0,0001$).

Table 2. Characteristics of dysmenorrhea

Variable	f	%
Experiencing dysmenorrhea:		
- Yes	164	98.8
- No	2	1.2
Age category:		
- Mid- teens	74	44.6
- Late teens	92	55.4
Location of Pain:		
- Hips	86	51,8
- Lower Abdomen	10	6
- Upper Abdomen	70	42.2
Levels of dysmenorrhea:		
- No pain	2	1,2
- Moderate pain	80	48.2
- Severe pain	84	50.6
The emergence of dysmenorrhea:		
- Before menstruation	23	13.87
- Early menstruation (first and second days)	138	83.13
- During menstruation	5	3
Characteristics of the pain that is felt:		
- Missing arise	139	83.73
- continuously	27	16.27
Effect of dysmenorrhea on activity:		
- uninterrupted	58	34.9
- activity was limited	65	39.2
- only lie	43	25.9
Actions are taken when dysmenorrhea:		
- Rest / sleep	94	56.6
- Taking herbal medicine/medicine	68	41
- Hot compresses	4	2.4

Table 3. The bivariate analysis of independent variables to dysmenorrhea

Characteristics	Dysmenorrhea experience				P-value
	Experiencing		No experience		
	f	%	f	%	
Age:					0.113
- Teen maid	72	97.3	2	2.7	
- Teen end	92	100	0	0	
Pain Location:					
- Hips	85	98.8	1	1.2	
- Belly down	8	88.9	1	11.1	

- Belly up	71	100	0	0	0.016
Characteristics of pain felt:					
- loss arises	137	98.6	2	1.4	0,0001
- Continual Disrupted	27	100	0	0	
activity due to dysmenorrhea	116	100	0	0	0.03
- Yes	48	96	2	4	
- No					
Effect of dysmenorrhea on activity:	56	96.6	2	3.4	0.287
- Not disturbed	65	100	0	0	
- Limited activity	43	100	0	0	
- Only lying down					
Actions are taken during dysmenorrhea:	93	98.9	1	1.1	0.949
- Rest/sleep	67	98.5	1	1.5	
- Drinking herbal medicine/medication	4	0	0	0	
- Hot compress					

Table 4. Relationship between menarche age and dysmenorrhea events

Characteristics	Mean diff (95% CI)	t	p-value
Age of menarche	12,524 (12,32 - 12,73)	122,263	0,0001
Experience Dysmenorrhea	1,012 (0,995 - 1,028)		

The results of this study indicate that dysmenorrhea generally occurs in late teens (18-21 years). The results of this study are the same as the results of other studies [18][19]. Also, the appearance of dysmenorrhea is generally felt at the beginning of menstruation, on the first day and the second day of menstruation. The results of other studies show that dysmenorrhea begins before menstruation in 50.2% and during menstruation in 49.8% of patients [20]. Dysmenorrhea also causes an adolescent activity to be limited. The location of the pain most felt by adolescents in this study is hip. The results showed the same results [21].

This variation in prevalence might be due to differences in the age range, respondent's socio-cultural status, and pain perception. Feelings of discomfort (physical and emotional) experienced by adolescents during menstruation, can make them think the pain is very severe. On the other hand, several previous studies reported that pain perception and pain expression are influenced by genetic, psychological, developmental, family, social, and cultural factors [22].

The results showed that the way to handle dysmenorrhea was done by resting/sleeping. But not a few, respondents who take medicine / take herbal medicine to overcome the pain they experienced. This is in line with the results of other studies [22].

Pain is a very subjective symptom and it is very difficult to measure pain. Dysmenorrhea is an important health problem for adolescents because it can adversely affect daily activities and quality of life of adolescents [18]. Therefore, there are still many teenagers who use drugs. This is done because dysmenorrhea affects their daily activities [23]. The use of medical therapies such as Non-Steroid Anti-Inflammation Disease (NSAID) or analgesics as pain relievers is often used as the first alternative for pain relief during menstruation (dysmenorrhea) because of their quick-relief effects [24][21].

In Indonesia, especially West Java, some respondents who experience dysmenorrhea still use alternative therapies such as drinking herbal medicine or by compressing their stomach using a bottle of hot water. Herbal medicine or herbal drinks are trusted by some respondents as a solution to reduce dysmenorrhea. Herbal medicine taken by adolescents is turmeric acid herbal medicine as a non-pharmacological way that is safe and easily obtained to treat dysmenorrhea and without side effects [25]. In addition to consuming herbal medicine, some respondents also use hot compresses to treat menstrual pain. This hot compress can be applied to bottles, towels, or bags filled with hot water [14].

CONCLUSION

The prevalence of dysmenorrhea in West Java is high. Generally, dysmenorrhea occurs in late adolescents, with the characteristics of pain felt in the hip area, disappearing arise, and affect the activity of respondents. Many respondents deal with dysmenorrhea by resting or sleeping, taking medicine or herbal medicine, and using hot compresses.

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