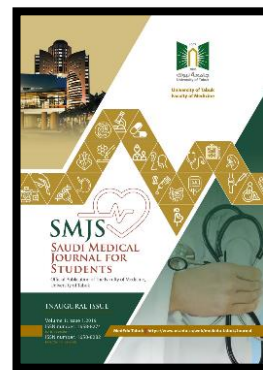


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BRIEF COMMUNICATION

BARRIERS TO HEALTH CARE SEEKING REGARDING DYSMENORRHEA AMONG FEMALE STUDENTS, UNIVERSITY OF TABUK, KSA

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ABSTRACT

Background: Dysmenorrhea is a common gynecological problem, its prevalence is high all around the world, and dysmenorrhea affects the lives of women, despite its prevalence and impact on health and social life it remains under diagnosed and under treated because women who suffer from dysmenorrhea usually don't seek health care.

Objectives: determine the barriers that prevent seeking healthcare for dysmenorrhea among female students in University of Tabuk, Tabuk, Saudi Arabia

Methods: A cross-sectional study was conducted in University of Tabuk KSA. Three hundred and fifty-nine female students were included; using an electronic questionnaire to collect the data. Data entry and analysis were performed using Microsoft Excel and SPSS.

Results: The prevalence of dysmenorrhea among the participants was 92.5 %. However, 80.4% from those who had dysmenorrhea did not seek health care. The most common reason for not seeking health care is their belief that pain is a normal natural process of menstruation, taking advice from others, using the internet, or the psychological barrier of fear from effects of treatment.

Conclusion and recommendations: We concluded that dysmenorrhea is highly prevalent among female students at University of Tabuk (92.5%), but most of them don't seek health care for dysmenorrhea (80.4%). There are a wide variety of barriers related to female belief that it's a normal condition for example, social issues or using the internet as a source of information and advice. Therefore, awareness campaigns must be held to increase the awareness about dysmenorrhea and its management among female students in University of Tabuk and other females in our society.

KEY WORDS: dysmenorrhea, pain management methods, barriers, health care seeking.

INTRODUCTION

Dysmenorrhea is one of the most common menstrual problems females suffer from (1). Dysmenorrhea, which is also called painful menstruation, is defined as severe cramping pain in the lower abdomen occurring before or during menstruation. It is highly prevalent 45% to 95% of women in the reproductive age complain of dysmenorrhea (2). Primary dysmenorrhea occurs in state of absence of any pelvic pathology usually accompanied by other symptoms like headache, dizziness, diarrhea, bloated, nausea, vomiting, backache and leg pain (1), which is associated usually with psychological problems (3). Pathogenesis of dysmenorrhea is explained by increase prostaglandins (PGs) production result in uterine muscles contraction, PGs is normally increase during menses however dysmenorrheic girls found to have higher level of PGs in comparison with eumenorrheic girls (3). Dysmenorrhea is clinically diagnosis so if the clinical history and physical examination consist with primary dysmenorrhea, a trial of Non-steroidal anti-inflammatory drugs (NSAIDs) or oral contraceptive will be considered if the symptoms not relived next step will be searching for underlying causes (4). for primary dysmenorrhea (NSAIDs) is the first line of treatment, choice of NSAID depends on their effectiveness for the individual patient (4). However; about 15% of women don't respond to NSAIDs, second line of treatment is oral contraceptive (5). Severity of primary dysmenorrhea influenced by some factors as early menarche, heavy menstrual flow, young age, nulliparity, depression and family history, the genetic factors found to have a role in determine the severity of primary dysmenorrhea pain (5). Dysmenorrhea and its associated symptoms have major effects on health-related quality and huge deteriorative effects on an individual and the whole community like absenteeism from school and work, difficulty in doing daily activities (1,6). several studies conducted in United states of America (USA), United Kingdom (UK), Japan, Malaysia, Nigeria, Saudi Arabia stated that; dysmenorrhea remains under diagnosed and under treated because patients usually do not seek help and some of them used self-management methods (7,8,9,10,11,12,13). Other than treatment prescription, seeking health care is important for diagnosis of underlying pathological condition as it is manifested by dysmenorrhea such as endometriosis, uterine fibroids or pelvic inflammatory diseases (13). Reasons for not seeking medical care of dysmenorrhea are illustrated in a study applied in the United States the results appeared in nine categories: symptoms are normal with period, self-management is enough, having limited resources, thinking healthcare providers were not concerned in symptoms management, do not know about treatment, symptoms tolerable, worry about treatment, feeling embarrassed and did not seek healthcare in general. Another study in Japan had results appear in seven categories: no need to visit for any reason, aversion or feeling of resistance, does not wish to spend money on treating menstrual symptoms, lack of knowledge, doesn't have time to visit a doctor, previous visit was ineffective, and other given reasons (11,14). However, there was no study to clarify the reason for not seeking health care for dysmenorrhea in Tabuk City, Kingdom of Saudi Arabia (KSA). The aim of this study is to identify barriers blocking female students from seeking healthcare in University of Tabuk.

METHODS

Study design and setting:

A cross sectional study was conducted in Tabuk City, specifically at University of Tabuk (TU) in year 2018, during a period of two weeks.

Study participant and sample size:

All female students at TU, were included in the study except those who suffer from pelvic pathology. The sample size was calculated by using Kish formula:

Where: $n = \frac{(z_{1-\alpha})^2 (p (1-p))}{D^2}$

Z1-a = 1.962, from the previous study (15) the prevalence of dysmenorrhea was assumed to be 60.9%. So, $p = 0.609$, the minimum calculated sample size with 5% error and 95% confidence interval = 366 students needed to be included in the study. The online questionnaire was sent to 366 female students and the response rate was 98.1%

Data collection tool:

The data was collected using an electronic questionnaire which was distributed among TU female students through social networking sites. Questionnaire was designed based on previous similar studies and was developed (15) containing both open-ended and close ended questions, asking about;

- a. sociodemographic variables such as age, specialty, height, weight, marital status, smoking, sport, education level of father and mother.
- b. Dysmenorrhea: twelve questions were formulated to identify the presence of dysmenorrhea (patterns of the menstrual cycle, duration, site and severity of pain, impact on life, the amount of blood loss, the number of changed towels per day during menses, age of menarche, family history), and the symptoms accompanying it.
- c. Dysmenorrhea management behaviors, were assessed through six questions; including methods of pain relief (medications used , herbals and hot drinks), seeking health care and any barriers or reasons for not attending health care visits (assuming pain is normal, worry about side effect , transportation problem , embarrassment ,health providers would not over help ,asking others for advice and search internet).

Ethical consideration:

The first page of the questionnaire includes statements about; the purpose of this study, eligibility criteria and confidentiality of data and a question for participation consent where the refusal of the questionnaire resulted in omitting the subject response. Ethical approval from ethical committee of TU was obtained.

Data management and analysis:

Data entry and analysis were performed by using Microsoft Excel and SPSS. Numbers and percent were used to represent data in tables and figures.

RESULTS

In this study we aimed to know the barriers to seeking health care for dysmenorrhea. This study enrolled 359 female university students, The mean age of the participants was 20.80 ± 1.57 , medical and natural science students constituted 54% and the remaining 46% were from other colleges, the majority 89.4% were single, 93.9% living with their family, the educational level of their fathers and mothers was under university in 65.7%, 66.9% respectively. The prevalence of dysmenorrhea among the participants showed 92.5%, duration of the pain was less than 2 days was in 35.5% and more than 2 days in 64.5%, abdomen is the commonest site for the pain where 92.5% suffer from, in the back 73.2%, inner thigh in 41.3%, other sites in 3.9%. The disorder of dysmenorrhea affects daily activities of 77.1%, affect the study process of 45.2%, also affect the social life in 44.3%, a 14.2% staying on bed the whole day. Family history of dysmenorrhea was positive in 58.4%, no family history in 15.4% and 26.2% don't know about it.

Of the participant 80.4% of those who had dysmenorrhea do not seek health care, Table 3. majority of students who had dysmenorrhea and didn't seek health care think that pain is a part of this natural process, and other causes clarified in Figure 1.

DISCUSSION

In this study we aimed to identify the barriers to health care sought regarding dysmenorrhea. From this study we found that dysmenorrhea is highly prevalent among University's female students (92.5%) but still within the value's range reported from several studies conducted in different times and different places 93% _ 46.8% (15,16,17,18,19,20,21) The wide variation in prevalence of dysmenorrhea may attribute to the difference in participants in each study, regarding their age, life stressor, or genetic components. As regards its impact we found that dysmenorrhea affects the students' life from several aspects similarly as reported by other studies (18,19,20,21). About 45.2% students who have dysmenorrhea reported that it affects their studying through increase of absenteeism or even decreases their concentration during classes. The absenteeism rate is much higher than the rate reported by a study carried out in King Abdul-Aziz University in Saudi Arabia, which was (28.3%) (15). Regarding the management of dysmenorrhea, 63.3% of the students try to use non-pharmacological approaches such as rest, herbal or hot drinks, 44% use pharmacological medications mostly paracetamol and non-steroidal anti-inflammatory drugs, the higher percent 83.2% of non-pharmacological management and lower percent 25.5% of pharmacological management was found in study conducted in India (16). About twenty percent of the participants consulted health care provider for dysmenorrhea, which is small percentage but still much higher than the percentage reported from king Abdul-Aziz University in Saudi Arabia (3.2 %) (15). this difference may attribute to increase the awareness about dysmenorrhea in our participants as more than have of them were having medical background which facilitates their behavior, however from the literature review health care seeking rate was consistent with our finding ranging between 14.2% to 16.3% (18,22). Among the factors that affect seeking health care in case of dysmenorrhea, was the belief of the females who participate in our study that pain is a normal process related to the nature of menstruation, other barriers to health care seeking are asking for others' advices and search in internet, shyness from going to a physician , thinking that there is nothing a health provider can do, worry over the side effects of the treatment and transportation problems, which is consistent with the barriers identified by other studies (11,14).

CONCLUSION AND RECOMMENDATIONS

From this study we concluded that dysmenorrhea is highly prevalent among female students at University of Tabuk (92.5%), but most of them don't seek health care for dysmenorrhea (80.4%). There are wide variety of barriers related to female belief that it's normal condition, social issues or using internet as a source of information and advice. We recommend; awareness campaigns be held to increase the awareness about dysmenorrhea and its management among female students in University of Tabuk and other females in our society.

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REFERENCES

1. Al-Kindi R& Al-Bulushi A. Prevalence and impact of dysmenorrhoea among Omani high school students. Sultan Qaboos University Medical Journal. 2011;11(4):485.
2. Harel Z. Dysmenorrhea in adolescents and young adults: etiology and management. Journal of pediatric and adolescent gynecology. 2006;19(6):363-371.

3. Iacovides S, Avidon I, & Baker F. What we know about primary dysmenorrhea today: a critical review. *Human reproduction update*. 2015;21(6):762-778.
4. Osayande A S, Mehulic S. Diagnosis and initial management of dysmenorrhea. *Am Fam Physician*. 2014; 89(5):341-346.
5. Jones A V, Hockley J R, Hyde C, Gorman D, Sredic-Rhodes A, Bilsland J, Scollen S. Genome-wide association analysis of pain severity in dysmenorrhea identifies association at chromosome 1p13.2, near the nerve growth factor locus. *Pain*. 2016;157(11):2571–2581.
6. Pitangui A C R, Gomes M R D A, Lima A S, Schwingel P A, Albuquerque A P D S, de Araújo R C. Menstruation disturbances: prevalence, characteristics, and effects on the activities of daily living among adolescent girls from Brazil. *Journal of pediatric and adolescent gynecology*. 2013;26(3):148-152.
7. Chen C X, Kwekkeboom K L, Ward S E. Beliefs About Dysmenorrhea and Their Relationship to Self-Management. *Research in nursing & health*. 2016;39(4):263-276.
8. O'Connell K, Davis AR, Westhoff C. Self-treatment Patterns among Adolescent Girls with Dysmenorrhea. *Journal of pediatric and adolescent gynecology* 2006;19(14):285-289.
9. Hewison A, van den Akker OB. Dysmenorrhoea, menstrual attitude and GP consultation. *British journal of nursing*. 1996;5(8):480-484.
10. Vincent K, Warnaby C, Stagg CJ, Moore J, Kennedy S, Tracey I. Dysmenorrhoea is associated with central changes in otherwise healthy women. *Pain*. 2011;152(9):1966-1975.
11. Nwankwo TO, Aniebue UU, Aniebue PN. Menstrual Disorders in Adolescent School Girls in Enugu, Nigeria. *Journal of pediatric and adolescent gynecology*. 2010;23(6): 358-363.
12. Abd El-Mawgod MM, Alshaibany AS, Al-anazi AM. Epidemiology of dysmenorrhea among secondary-school students in Northern Saudi Arabia. *Journal of the Egyptian Public Health Association*. 2016;91(3):115-119.
13. Chen CX, Shieh C, Draucker CB, Carpenter JS. Reasons women do not seek health care for dysmenorrhea. *Journal of clinical nursing*. 2018;27(1):301-308.
14. Tanaka E, Momoe M, Osuga Y, Rossi B, Nomoto K, Hayakawa M, et al. Burden of menstrual symptoms in Japanese women - An analysis of medical care-seeking behavior from a survey-based study. *Journal of women's health*. 2014;6:11.
15. Ibrahim NK, AlGhamdi MS, Al-Shaibani AN, AlAmri FA, Alharbi HA, Al-Jadani AK, et al. Dysmenorrhea among female medical students in King Abdulaziz University: Prevalence, Predictors and outcome. *Pakistan J Med Sci*. 2015;31(6):1312–7.
16. Helwa HAA, Mitaeb AA, Al-Hamshri S, Sweileh WM. Prevalence of dysmenorrhea and predictors of its pain intensity among Palestinian female university students. *BMC Womens Health*. 2018;18(1):18.
17. Chauhan GD, Kodnani AH. A study of prevalence and impact of dysmenorrhea and its associated symptoms among adolescent girls residing in slum areas of Vadodara city, Gujarat. *Int J Med Sci Public Heal Int J Med Sci Public Heal Online*. 2016;5(3):510-515.
18. Omidvar S, Bakouei F, Amiri FN, Begum K. Primary Dysmenorrhea and Menstrual Symptoms in Indian Female Students: Prevalence, Impact and Management. *Glob J Health Sci*. 2016;8(8):135.
19. Kazama M, Maruyama K, Nakamura K. Prevalence of Dysmenorrhea and Its Correlating Lifestyle Factors in Japanese Female Junior High School Students. *Tohoku J Exp Med*. 2015;236(2):107-113.
20. Taiwo O O. Dysmenorrhea and impact on Quality of Life. *Journal of Current Medical Research and Opinion*. 2018;1(3).
21. Parker MA, Sneddon AE, Arbon P. The menstrual disorder of teenagers (MDOT) study: determining typical menstrual patterns and menstrual disturbance in a large population-based study of Australian teenagers. *BJOG An Int J Obstet Gynaecol*.

2010;117(2):185–192.

22. Ameade EPK, Amalba A, Mohammed BS. Prevalence of dysmenorrhea among University students in Northern Ghana; its impact and management strategies. BMC Womens Health. 2018;18(1):39.

Table 1. Prevalence and pattern of dysmenorrhea among university female students (n=359)

Dysmenorrhea		Frequency	Percent
Yes		332	92.5%
No		27	7.5%
From those who had dysmenorrhea N= 332 (92%)			
Duration	Less than 2 days	118	35.5%
	≥2 days	214	64.5%
Site of pain*	Abdomen	307	92.5%
	Back	243	73.2%
	Inner thigh	137	41.3%
	others	13	3.9%
Impact*	On social life	174	44.3%
	On studying	150	45.2%
	On daily activities	256	77.1%
	On bed all day	4	1.2%
	Nothing	47	14.2%
Family history	Yes	194	58.4%
	No	51	15.4%
	Don't know	87	26.2%

*Multiple answers were allowed.

Table 2. Methods of pain relive among those who had dysmenorrhea N= 332

Pain reliving		Frequency	percent
Medications use	Yes	146	44%
	No	186	56%
Herbal and hot drink	Yes	210	63.3%
	No	122	37.6%

Table 3. Seeking health care among those who had dysmenorrhea N=332

Visiting doctor	Frequency	Percent
Yes	65	19.6%
No	267	80.4%

Figure 1: Barriers to health care seeking among female students having dysmenorrhea N= 26

