



EVALUATION OF MENSTRUAL PROBLEMS AMONG FEMALES OF KARACHI AND AWARENESS ABOUT AMENORRHEA, DYSMENORRHEA AND MENORRHAGIA

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Abstract- Menstrual disorders are a common problem in females. These disorders are often the source of anxiety for the patients and the families. In females common menstrual disorders are dysmenorrhea, amenorrhea and menorrhagia. The length of menstrual cycle is highly variable. Normal cycles for menstrual are characterized by a cycle length of 28 days (± 7 days) and the duration of flow 4 days ± 2 days and a blood loss of 40mL (± 20 mL). The mean volume of menstrual blood loss is about 43mL with a normal range of 20 to 80mL. Cycles consider abnormal if they are longer than 8 to 10 days in duration or if more than 80mL of blood loss occurs after the first 2 years from the onset of menarche. Total 400 females were interviewed by our group and out of them 328 (82%) suffered from menstrual disorders. 211(64.32%) out of 328 were suffering from dysmenorrhea, 49 (14.93%) were suffering from Amenorrhea and 91 (27.74%) were suffering from menorrhagia. Among the 211 females having dysmenorrhea, prevalence found among the age group of 21-31 is 43.6% i.e. in 92 females. Amenorrhea prevalence is prominent among the age group of 21-30 and 18 (36.73%) out of 49 females of this age group suffer from it. Menorrhagia is also prevalent in the age group of 21-31 and 46 (50.54%) out of 91 females has menorrhagia.

Proper understanding of the normal menstrual cycle is necessary to pinpoint the causes of these disorders and aids in the judicial management of them. Accurate diagnosis can be obtained by history, complete physical examination and by focused investigations in these females is mandatory to direct appropriate management.

Keywords- Amenorrhea, Dysmenorrhea, Menorrhagia, Prevalence and awareness

Introduction

Menstrual disorders are a class of problems affecting a woman's monthly menstrual cycle [1]. Menstruation disorders are a common problem during adolescence. These types of disorders may cause anxiety for patients and families. For a regular menstrual cycle (MC) the median age of menarche is about 12.77 years. The average interval between the larche and menarche is about 2 years, and 90% of females menstruate by the time they have Tanner IV breast and pubic hair development. Most cycles occur between 21-35 days with 3-10 days of bleeding and 30-40 ml of blood loss. An ovulatory cycles and irregular menstrual patterns are common within 24 months of menarche [2].

Classification of Menstrual Disorders

Attempts are currently underway to establish a standardized international nomenclature for menstrual problems. The broad classification is as follows:

- Amenorrhea and oligomenorrhea (lack of bleeding or too little bleeding or irregular periods or missed periods)
- Dysmenorrhea (painful menstruation)
- Menorrhagia (excessive bleeding)

Amenorrhea

Amenorrhea may be primary (i.e., never menstruated) or secondary (ie, menarche, but no periods for 3 consecutive months). Amenorrhea is the absence of menstruation by age 16 years in the pres-

ence of normal pubertal development or by age 14 years in the absence of normal pubertal development. Secondary amenorrhea is more common than primary amenorrhea.

Dysmenorrhea

Dysmenorrhea is a very common complaint and may be primary or secondary. Symptoms include crampy lower abdominal and pelvic pain that radiates to thighs and back without associated pelvic pathology. Prostaglandin levels increase during the luteal and menstrual phases and causing uterine contractions. In Secondary dysmenorrhea pain is associated with pelvic pathology (e.g., uterine fibroids, bicornuate uterus, endometriosis and pelvic inflammatory disease). An underlying pelvic pathology (e.g., endometriosis) or a uterine anomaly (e.g., fibroids) may be present in about 10% of severe dysmenorrhea cases.

Menorrhagia

- Menstrual bleeding that more than 8-10 days with loss of over 80 mL blood is considered excessive [2].
- Heavy bleeding (menorrhagia) includes prolonged menstrual periods or excessive bleeding.

Oligomennorrhea

Light or infrequent menstruation (oligomenorrhea) refers to menstrual periods that occur more than 35 days. It usually is not a cause for concern, except if periods occur < 3 months apart [3].

Methodology

Problems associated with menstruation always affect the female's daily life. During the period of September- October 2013 we undertook a survey of women age starting from 11 years up to 60 years and above. The data were analyzed on the women residing in Karachi. 400 women are included in this study among which 328 women were having menstrual disorders. The study was based on questionnaire which contains demographic details include Name, Age, Qualification, Weight and Marital Status. The questionnaire was divided into parts. First parts includes the questions about Dysmenorrhoea, the other parts contains questions about Amenorrhoea and Menorrhagia.

Result

Total 400 females were interviewed, out of them 328 (82%) suffered from menstrual disorders. 211 (64.32%) out of 328 were suffering from dysmenorrhoeal [Table-1], 49 (14.93%) were suffering from Amenorrhoea [Table-2] and 91 (27.74%) were suffering from menorrhagia [Table-3].

Table 1- Prevalence of Dysmenorrhoea in different age groups

	Dysmenorrhoea		Total	
	No	Yes		
Age				
	10-20	19	59	78
	21-30	62	92	154
	31-40	21	37	58
	41-50	13	21	34
	51-60	2	2	4
Total		117	211	328

Table 2- Prevalence of Amenorrhoea in different age groups

	Count	Amenorrhoea		Total
		No	Yes	
Age				
	10-20	64	14	78
	21-30	136	18	154
	31-40	48	10	58
	41-50	27	7	34
	51-60	4	0	4
Total		279	49	328

Table 3- Prevalence of Menorrhagia in different age groups

	Count	Menorrhagia		Total
		NO	Yes	
Age				
	10-20	60	18	78
	21-30	108	46	154
	31-40	46	12	58
	41-50	19	15	34
	51-60	4	0	4
Total		237	91	328

Among the 211 females having dysmenorrhoea, prevalence found among the age group of 21-31 is 43.6% i.e. in 92 females. Amenorrhoea prevalence is prominent among the age group of 21-30 and 18 (36.73%) out of 49 females of this age group suffer from it. Menorrhagia is also prevalent in the age group of 21-31 and 46(50.54%) out of 91 females has menorrhagia. Statistical data is given in [Table-4] and [Table-5] which indicates the standard error of mean and SD of each group. Chi square values of dysmenorrhoea, Amenorrhoea and Menorrhagia are 6.225 (df 4), 3.635 (df 4) and 8.717(df 4) with p value of 0.183, .458 and 0.069.

Moreover among 328 females, 238(72.6%) does not know about dysmenorrhoea and 90(27.4%) knows about it [Table-6], 235(71.6%) have no knowledge about Amenorrhoea and 93(28.4%) knows about

it [Table-7] and 253(77.1%) does not know about menorrhagia and 75(22.9%) knows about it [Table-8].

Table 4- Statistical data of Dysmenorrhoea, Amenorrhoea and Menorrhagia

	Dysmenorrhoea	Amenorrhoea	Menorrhagia
No of cases	328	328	328
Std. Error of Mean	0.02649	0.01971	0.02476
Std. Deviation	0.47976	0.35702	0.44842

Table 5- Chi-Square values of dysmenorrhoea, amenorrhoea and menorrhagia

Pearson Chi-Square	Value	df	Asymp. Sig. (2-sided)
Dysmenorrhoea	6.225 ^a	4	0.183
Amenorrhoea	3.635 ^a	4	0.458
Menorrhagia	8.717 ^a	4	0.069

Table 6- Awareness about Dysmenorrhoea

	Frequency	Percent	Cumulative Percent
Not know	238	72.6	72.6
know	90	27.4	100.0
Total	328	100.0	

Table 7- Awareness about Amenorrhoea

	Frequency	Percent	Valid Percent	Cumulative Percent
Not know	235	71.6	71.6	71.6
Valid know	93	28.4	28.4	100
Total	328	100	100	

Table 8- Awareness about Menorrhagia

	Frequency	Percent	Valid Percent	Cumulative Percent
Not know	253	77.1	77.1	77.1
Valid know	75	22.9	22.9	100
Total	328	100	100	

Discussion

Menstrual disorders are the common problem in women especially during adolescence. In our study we interviewed total 400 females out them 328 females (82%) suffering from some kind of menstrual disorders. This is the cross sectional study. The evaluation was purely made on questions. In this study the prevalence of dysmenorrhoea is on the highest rate i.e. 211 out of 328 females were suffering from the disease among which 92 (43.6%) from 211 are belong to age group of 21-30. 2nd highest rate of dysmenorrhoea is observed in age group of 11-20 that is adolescence group i.e. 59 girls were having the dysmenorrhoea. Menorrhagia is the second most prevalent menstrual disorder observed in the study. 91 out of 328 females are suffering from menorrhagia among which 46 (50.54%) out of 91 belongs to age group of 21-30yrs.

The third most prevalent menstrual disorder is amenorrhoea. 49 out of 328 females are suffering from the disease and its prevalence is also high in age group of 21-30yrs.

We noted that dysmenorrhoea is the most prevalent menstrual disorder among the age group of 21-30yrs. Several studies have been done to evaluate different kinds of menstrual problems and their prevalence in various kinds of population, their Pathophysiology and etiology, incident in different age groups, treatment and burden to society [5-8]. Our study supports this hypothesis that females of this age especially adolescent girls were usually nulliparous, were doing more physical activity for losing weight and not eating properly so they were having dysmenorrhoea [2]. The second most prevalent disease is menorrhagia. Its affects 30% of women in reproduc-

tive age. Although the estimated community prevalence of bleeding disorder is 2%, these disorders consistently reported to affect 10-20% of women with objectively documented menorrhagia and to be even higher in adolescence [9]. In UK, 20% of all women and 30% in USA, have hysterectomy before the age of 60, menorrhagia is the main prescribing problem in atleast 50-70% cases. Our study shows that the bleeding disorder is most common at the age group of 21-30 yrs i.e. post adolescent age.

Awareness about the menstrual disorders in 328 females under evaluation was not good. The importance of educating adolescent girls about their reproductive health is gaining momentum in our country during past few years [10]. In our study, we found that 238 (72.6%) females out of 328, does not know about dysmenorrhea; 235(71.6%) have no knowledge about amenorrhea and 253(77.1%) out of 328 females have no idea about menorrhagia. Our study is about the prevalence of menstrual disorders in females of all age group but it also highlights the need of educating the females about their reproductive health problems.

Conflicts of Interest: None declared.

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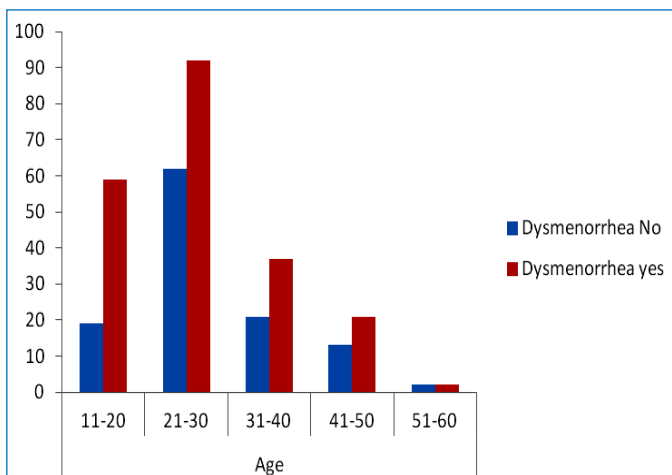


Fig. 1- Prevalence of Dysmenorrhea in different age groups

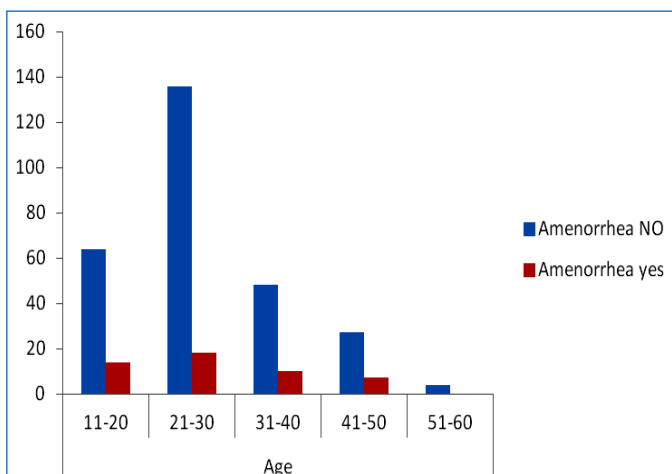


Fig. 2- Prevalence of Amenorrhea in different age groups

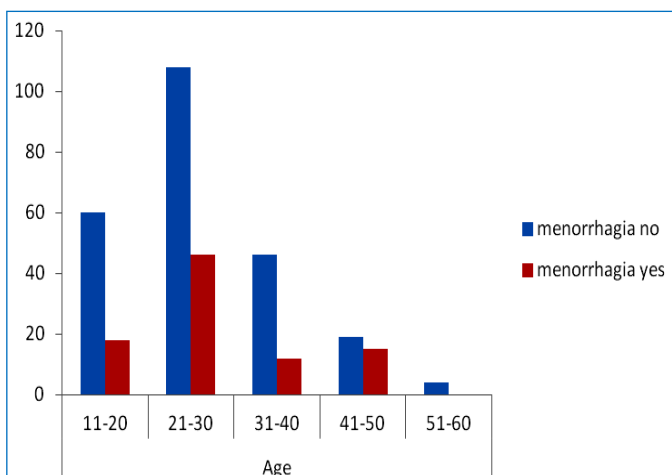


Fig. 3- Prevalence of Menorrhagia in different age groups