

## **Impact of dysmenorrheal among sample of female students in Tikrit University at 2008**

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### **Abstract**

Dysmenorrhoea is menstrual condition characterized by pain and a frequent menstrual cramp associated with menstruation. It is a leading cause of recurrent short-term college absence in female students and a common problem in women of reproductive age. This cross-sectional study with cluster sampling technique was done on 377 female's students in Tikrit University from 15<sup>th</sup> February to 15<sup>th</sup> of May 2008, directed to identify the prevalence of dysmenorrhoea among students, characteristics of this condition like severity of pain, drugs used to relieve pain, and to identify the absenteeism rate from colleges. The results of this study revealed that 85.4 % of students experienced dysmenorrhoea (mild form 15.2%, 46.3% of moderate and 38.5% sever form of pain) and about 22% of female students with dysmenorrhoea did not used medication while 51.9% used analgesia anti-inflammatory and antispasmodic drugs. Absenteeism rate from college during menstruation account 63% mother dysmenorrhora is 52.8% of the students with dysmenorrhoea while only 29% of students without dysmenorrhoea significant predictor of dysmenorrhoea were irregular, long cycle and heavy bleeding. There is a gap of knowledge about dysmenorrheal as a normal physiology and there is a bad traditional believes and attitudes towards this condition regarding the effect of drugs used for treatment of dysmenorrheal on future reproductive life as a cause of infertility.

**Key words:** Dysmenorrhoea, Menarche, Adolescent

### **Introduction**

Dysmenorrhoea is painful menstruation; it is very common complaint with at least 50% of post menarcheal women experience some degree of dysmenorrhoea in at least 20% of women it is of such severity that interferes with daily activities (1). Many cultures believed that menstruation may controlled by moon and that menstruation was modern times, has been show that menstrual fluid contain substance that enhance uterine contraction ,these substances has been shown to be prostaglandin (2).

Dysmenorrhoea may be classified as:

1. Primary types which start from beginning and usually life long, sever and frequent menstrual cramping caused by sever an abnormal uterine contractions.
2. Secondary dysmenorrhoea: it is due to some physical cause and usually of later onset, caused by another medical condition in the body (pelvic inflammatory disease and endometriosis). (3)

Symptoms of dysmenorrhoea are: cramping in the lower abdomen, pain in the low back, nausea, vomiting, diarrhea,

fatigue, weakness, fainting and, headache. Treatment of dysmenorrhoea can be none—steriodal, anti-inflammatory pain, acetaminophen, oral contraceptives and progesterone .Dietary modification to increase protein and decrease sugar and caffeine intake, vitamin supplements, regular exercise and abdominal massage (4)

This study aimed to identify prevalence of dysmenorrhoea among female students in Tikrit University, to estimate the impact of dysmenorrhoea in absenteeism from college during menstruation times and to identify the knowledge and attitude of female students about and behavior through this condition.

### **Subjects and Methods**

A cross –sectional study was carried from 15<sup>th</sup> February to 15<sup>th</sup> of May 2008 .including 377 female students from different colleges in Tikrit University ; cluster sampling technique for the colleges included in this study used then systematic sampling method for the study unit selection was performed . Official agreement of the

students to be enrolled in this study was done and identify of the students was kept confidential and data collection done by direct interview through specific questionnaire's form designed for this purposes include information about residency, age ,marital status, menarchial age ,information prior menarche ,present of a pin, severity of pain, drugs used to relieve pain, absenteeism from college and their thoughts about affect of dysmenorrhoea in future life and finally family history of dysmenorrhoea Data interpretation and analyzed by using software program (SPSS version 11).

## **Results**

In this study, dysmenorrhoea was reported in 322 females students out of 377, 283 were single, 35 were married and only 4 widow while 273 from urban in front of 49 from rural areas and about 72 % of them having information about menstruation before menarche and the most common source of information from their mothers as in table (1).

The characteristic of menstrual cycle was founded that From 322 females students who hade dysmenorrhoea about 42.55%, 37.27% having abnormal length of period and irregularity respectively in comparison with those without dysmenorrhoea were 29.1%, 25.45%; in 38.5% the pain was sever, 46.3% of moderate type and only mild pain in 15.3% also the duration of pain last for one day in 62.1% and 31.4% continue for 2 days and just 15.21% the pain remained for 3 days (table 2).

The absenteeism from college account 63% due to the pain during menstruation time and the current study revealed that 51.9% used medication to relieve the pain and about 18.2%used hot fluids, 7.8% used more than one methods and about 22% not used any things, 33.85% believed that dysmenorrhoea will affect their future life as demonstrated in table (3).

Mother and sister dysmenorrheal form 53%, 71% respectively of students dysmenorrhea as positive family history while only 39% their mother did not having dysmenorrhea and 8% they did not know whether their mother having or not dysmenorrheal, and both mother –sister dysmenorrhea form

about 50.9% of students with dysmenorrheal as shown in table (4).

## **Discussion**

Dysmenorrhoea is the commonest disorder among female adolescents and is one of the commonest gynecological complaints in young women who present to doctor today. Dysmenorrhoe among adolescent is usually of the primary type (1). In current study 85.4% of students reported pain with menstruation, this is comparable to previously reported prevalence in both industrialized and developing countries that ranged from 20% to 93% for the same age group (1,2) and this result similar to result of study in Egypt 2002 which found that dysmenorrhea prevalence was 75% among adolescent (5).

In this study 38.5% of students with dysmenorrhoea reported their pain as sever, while in other countries, sever form was reported by 15%-53% of adolescent (5).these differences in the degree of severity of pain may be related to culture difference in pain perception and variability in pain threshold.

Duration of cycle was < 3 days (13.35%) in students with dysmenorrhoea, but the majority of students > 5 days (29.19%) other study show that 60% of adolescent with dysmenorrhea >5 days in duration (7).

It has been reported that the risk of dysmenorrhea is higher in women with irregular, prolonged or heavy menstrual flow as well as early age of menarche (8).

In this study was founded that prevalence of dysmenorrhea was higher among those with irregular menstruation and with family history of mother and or sister dysmenorrheal.

The absenteeism rate in collage female students due to dysmenorrhea was reported in this study (63%), in other study revealed that the dysmenorrhea is one of main causes of absenteeism among adolescent girls (9, 10, 11).

Current study found that most of drugs used to relieve dysmenorrheal symptoms are analgesic (26%) ,21.4% used anti-inflammatory drugs and about 22% did not used anything, while other studies reported that the most common medications used by women with dysmenorrhea were analgesic agent (53%) and non-steriodal anti-

inflammatory drugs (42%) .( 12,13) this difference may be due to different in knowledge and culture between Iraq female students and other countries and because most of the students enrolled in this study believed that the used of medication may affect future reproductive life.

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**Table (1)** Demographic features of the sample

features		No. of student with dysmenorrhoea	No. of students with out dysmenorrhoea	Total
Residence	urban	273	41	314
	Rural	49	14	63
Marital status	single	283	43	326
	Married	35	12	47
	widow	4	0	4
Information before menarchea	Yes	272	27	299
	No	50	28	78

**Table (2)** characteristics of menstrual period

Characteristics		No. of students with dysmenorrhoea	No. of students with out dysmenorrhoea	Total
Length of cycle	3-5 days	185	39	224
	< 3days	43	5	48
	>5 days	94	11	105
Regularity	3-5 weeks	202	41	243
	< 3weeks	48	8	56
	>5weeks	72	6	78
Sites of the pain	abdomen	156	0	156
	back	96	0	96
	headache	28	0	28
	2 sites	42	0	42
	No pain	0	55	55
Types of pain	sever	124	0	124
	Moderate	149	0	149
	Mild	49	0	49
	No pain	0	55	55
Duration of pain	1 day	200	0	200
	2 days	101	0	101
	3 days	21	0	21

**Table (3)** Distribution of the sample according the affect of dysmenorrhoea and drugs used.

Item		No. of students with dysmenorrhoea	No. of students with out dysmenorrhoea	Total
absenteeism rate from colleges	yes	203	9	212
	no	119	46	165
Drugs used /anti-inflammatory	Analgesic agent	69	0	69
	Antispasmodic	84	4	88
	Hot –fluids	14	0	14
	Hot –fluids	59	1	60
	More than 1 methods	25	0	25
	Nothing used	71	50	121
Affect of dysmenorrhoea on future reproductive life	yes	109	7	116
	no	213	48	261
		322	55	377

**Table (4)** family history of dysmenorrhoeal

Item		No. of students with dysmenorrhoea	No. of students with out dysmenorrhoea	Total
Mother dysmenorrhoea	yes	170	16	186
	no	126	33	159
	I don't know	26	6	32
sister dysmenorrhoea	yes	229	11	240
	no	81	39	120
	I don't know	12	5	17
Mother-sister Dysmenorrhoeal	yes	164	17	181
	no	126	24	150
	I didn't know	32	14	46