IJPSR (2018), Volume 9, Issue 5 (Research Article)

INTERNATIONAL JOURNAL OF PHARMACEUTICAL SCIENCES AND RESEARCH

Received on 12 August, 2017; received in revised form, 23 February, 2018; accepted, 12 April, 2018; published 01 May, 2018

PATTERN AND PREVALANCE OF MENSTRUAL DISOREDERS IN ADOLESCENTS

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Keywords:

Dysmenorrhea, Adolescent, Menstruation, Amenorrhea, Prevalence

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ABSTRACT: Background: Menstrual disorders frequently affect the quality of life of adolescents and young adult girls and can be indicators of serious underlying problems. **Objectives:** Study aims to determine the prevalence and pattern of menstrual disorders in adolescents and their effect on everyday life. **Design:** A cross sectional study design was adapted. **Settings:** Government and private schools of Arifwala city, District Pakpattan, Punjab, Pakistan. **Materials and Methods:** All girls between the age of 10 - 19 years were included in the study during the period, June-2016 to December-2016. Convenient sampling technique was used to select the schools, and to enroll the study participants, stratified sampling was utilized. A total of 1000 girls participated in the study. **Main outcome measures:** To determine the prevalence and pattern of menstrual disorders and their effect on everyday life. **Results:** Results showed that, significant relationship was found between age and dysmenorrhea ($P < .001$), irregular menstruation ($P = .001$), secondary amenorrhea ($P = .005$) and between BMI and dysmenorrhea ($P = .004$) and regular menstruation. ($P = .013$). Regularity of cycles was significant with economic status ($P < .001$) and dysmenorrhea ($P < .001$). Schooling was significant with amenorrhea ($P = .002$), regularity of cycles ($P = .007$) and dysmenorrhea ($P < .001$). Prevalance results showed regular menses in 43%, 44.4% experienced pain during menstruation, 75% experienced stress as premenstrual symptoms. Irregular cycles and dysmenorrhea have significant relation with duration of menses ($P = .02, .021$), length of menstrual cycle ($P < .001, P < .001$), secondary amenorrhea ($P < .001, P < .001$), presence of clots ($P < .001, P < .001$), visit to gynaecologists ($P = .005, P < .001$) and severity of pain ($P < .001, P < .001$). **Conclusion:** Economic status was the most influential factor to affect menstrual behavior. Dysmenorrhea and premenstrual symptoms were most distressing, leading to school absenteeism and off days of work. **Limitation:** Data was collected from schools of only one city.

INTRODUCTION: Adolescence is described as the age in the vicinity of 10 and 19 years [1]. The term "pubescence" alludes to whole of the bodily and mental changes occurring in immaturity, which prompts sexual development.

QUICK RESPONSE CODE

DOI: 10.13040/IJPSR.0975-8232.9(5).2088-99

Article can be accessed online on: www.ijpsr.com

DOI link: http://dx.doi.org/10.13040/IJPSR.0975-8232.9(5).2088-99

The point of reference of female pubertal improvement is the commencement of menstruation which generally happens between 12 and 13 years of age in all healthier populations [2]. Periods as a rule begin between age 11 and 14 and proceed until menopause at about age 51 and normally last from three to five days [3]. The regular monthly cycle of periods is known as the menstrual cycle. The four basic stages of the menstrual cycle are: Menstruation, the follicular stage, ovulation, the luteal stage [4]. During menstruation, the thickened outside layer of the uterus is disposed of from the body through vagina.

Blood cells from the coating of the uterus and bodily liquid form the menstrual fluid. During the initial stages of cycle, the level of estrogen begins to rise, coating of the uterus grows and thickens due to the rise in the levels of estrogen [5].

Among menstrual disorders are; oligomenorrhoea (infrequent menstruation repeated after more than 35 days), secondary amenorrhoea (absence of periods during the last 3 months), polymenorrhoea (menstruation repeated about once every 21 or less days), regular menstruation (frequent menstruation repeated once every 28 - 32 days with duration 5 - 7 days), hypermenorrhoea [duration of period more than 7 days and blood loss greater than 80 mL (using more than 5 pads)], hypomenorrhoea [duration of period less than 3 days and slight blood loss (using 1 pad)]. Dysmenorrhoea (painful menstruation or menstrual cramps). Most common symptoms occurring 10 days before menstruation and disappearing at the start of menstruation are usually known as premenstrual disorder. It may include tender breasts, bloating of the abdomen, rapid mood changes, depressed mood and many others [6].

Dysmenorrhea is the most usually announced issue. More than one portion of ladies who emancipate has some agony for 1 - 2 days every month [7]. It may be primary dysmenorrhea and secondary dysmenorrhea [8]. Menstrual disorders are common among adolescents. These disorders can badly affect the quality of life of adolescents. These disorders may possibly the source of anxiety for the whole targeted population. Other than these well-known health problems, these can also lead to serious consequences such as limitations on attendance at work and academic performance which ultimately effects future achievements and employment prospects [9].

Health, sense of wellbeing and quality of life of young women will be improved as a result of early diagnosis and management of these disorders. It may also lower her risks for future disease and ill-health. Menstrual disorders are equally common in developing countries as well as in developed countries and when services are available this will encourage women in developing countries to seek care for them [10]. There is a lack of information about the awareness and behaviors of adolescents towards menstruation. Mostly girls have little knowledge about regular menstruation and about their irregularities. Their only source of information is from their mothers or peers. Girls are interested in knowing more about normal and abnormal menstruation. Having knowledge of these disorders, helped them to get medical advice as and when required [11].

In developing countries, the main causes of mortality are in the priority of the health sector [12]. Menstrual disorders are the main concern of women, is the result found during researches that were carried out in various developing countries. However a very little attention is paid to understand women's menstrual complaints [13]. Worldwide burden of disorder estimates does not encompass menstrual dysfunction and while reproductive health programs amplify their attention to address gynecologic morbidity, the application evaluating and treating menstrual problems is not always commonly considered [14].

Life of adolescents is majorly affected by menstrual disorders. Among these are women who are affected by dysmenorrhea and heavy menstruation. The World Health Organization reports that 18 million women aged 30 - 55 years identify their menstrual bleeding to be extreme. Serious economic consequences in terms of health care costs are seen due to these menstrual disorders. These economic consequences are due to the intake of costly hormonal drugs and laboratory tests. Health problems can result in limitations on attendance at work and school which delay academic achievements and employment projections [6].

The menstrual cycle entails the coordination of many activities through the hypothalamic pituitary ovarian axis and is effortlessly prompted through physiological, pathological and psychological adjustments occurring all through the reproductive lifespan. The age of menarche is determined by means of standard health, genetic, socio-financial and nutritional factors [15]. Menstrual issues are very common in youth. It could cause a considerable amount of pressure to both the sufferers and their parents. Variations of the menstrual cycle on this age are widely dispensed. The poor development of the hypothalamic- pituitary- ovarian (HPO) axis is

the main cause of these disorders (Endocr and Basel 2012). Menstrual problems can give the idea of some primary serious conditions like polycystic ovarian syndrome (PCOS) and endometriosis. If these disorders left undiagnosed and untreated, may have serious long term effects on quality of life of adults [16]. 9 to 18 years is the age limit for menarche. Socioeconomic, environmental, nutritional and geographical variations additionally have an effect on menarrcheal age. Psychological adjustment with menstruation, premenstrual and menstrual signs and issues of menstruation are protected in these issues [4].

Medical evidence points out that as of the third year after menarche the interval among bleeding durations is within the range of 21 - 34 days, with a flow lasting from three to 7 days and an average menstrual blood loss of 35 ml (range 5 - 80 ml) [17, 18]. Common abnormalities outside normal references rarely occur, or can also become intense, suggesting a shift from the ordinary endocrine-gynecological functional axis [19]. Dysmenorrhea is the maximum not unusual complaints for girls which can affect quality of life. Dysmenorrhea is a subgroup of pelvic pain that manifests as painful menstrual drift [18].

The prevalence of dysmenorrhea is hard to decide because of special definitions of the circumstance. Prevalence estimates range from 45% to 95%. However, dysmenorrhea seems to be the maximum not unusual gynecological condition in ladies regardless of age and nationality. Absenteeism from work and school because of dysmenorrhea is not unusual. 13% to 51% ladies had been absent at least once and 5% to 14% are regularly absent due to the severity of symptoms [19].

Primary dysmenorrhea is painful menstruation in absence of any gynecological disorder. Typically it starts off evolved at six to one year after menarche and might hold to menopause. At any time in a female's life among menarche and menopause, the secondary dysmenorrhea can occur. After 25 years of age, it most customarily occurred subsequent to a gynecological pathology including endometriosis and ovarian cysts [18].

Increased levels of some hormones like prostaglandin in the endometrium and menstrual blood, was observed in women suffering from menstrual disorders. Symptoms improved as prostaglandin levels decreases. Using non-steroidal anti-inflammatory tablets (NSAIDs) is a rational and powerful remedy of primary dysmenorrhea. As, it results in inhibition in the production of prostaglandins in endometrium [20].

Different studies showed different prevalence rates reported for dysmenorrhea. Globally, 43% to 90% prevalence rates have been reported [21]. In Pakistani context it has also been determined that girls at their most reproductive age fail to carry out their sports of each day living successfully during the menstruation duration and because of cultural motives they do not searching for medical attention as well [13].

The absence of menstruation is characterized as amenorrhea. The absence of menstruation in 16 year old girls after the development of secondary sexual characteristics, or with no secondary sexual characteristic development in 14 year old girls, is characterized as primary amenorrhea. The term 'delayed puberty' is more appropriately used for secondary amenorrhea [21].

A quarter of female population is affected by heavy menstrual bleeding (HMB). Physical, emotional and social quality of life is negatively affected by HMB. It also reduces work capacity thus reducing and affecting quality of life [6]. Menstrual blood loss (MBL) of 80 mL or extra in keeping with cycle is characterized as heavy regular menstrual bleeding. The definition has been considered in scientific studies, whilst in exercise, diagnosis is commonly primarily based at the subjective belief of MBL and its impact on high - quality of lifestyles (QOL) [22].

Despite the high prevalence of HMB, many women lack a fundamental understanding of the disorder and often present to the emergency department seeking treatment rather than obtaining preventive care in outpatient health clinics [23].

Menstrual dysfunction is common in our society. The health fame and the best of life of ladies is strongly laid low with those disorders. The private nature of the statistics associated with menstruation, does not entice the attention of the general public health network [21].

Present study aims to determine the prevalence of menstrual symptoms in adolescents and to identify menstrual patterns and related disorders and their effect on everyday life.

MATERIALS AND TECHNIQUES: A cross sectional study was conducted at government and private schools of Arifwala City, District Pakpattan, Punjab Pakistan, during the period from June-2016 to December-2016. All girls between the age limit of 10 - 19 years were included in the study, the girls suffering from other serious health problems were excluded. Convenient sampling approach was used to choose the schools, and to enroll the study individuals, stratified sampling method was applied. A complete set of 1000 ladies participated in the study.

A questionnaire was designed according to the objectives of study. It consisted of six sections that include questions related to basic demographics, menstruation, premenstrual syndrome, cycle patterns, menstrual pain and impact of menses on daily activities. Questions related to regularity, period and heaviness, college absence because of menstruation, the pain observed with menstruation, and physical and emotional signs and symptoms observed in the course of the menstrual cycle, interference of menstruation with diverse lifestyles sports and few statements concerning diverse aspects and perceptions surrounding menstruation, had been covered in questionnaire.

Ethical Consideration: Study was approved from the Advance Studies Research Board of the Institution. Prior permission was sought from each school administrator to distribute the questionnaires. Verbal information about the study was given to participants. Confidentiality of participants was maintained.

Data Collection and Statistical Analysis: Based on their high enrollments, 4 out of 9 government senior high faculties and four private high faculties were decided to participate in the study. At some stage in information sessions at the participating schools, information sheets were dispensed between individuals for their parents and after 1 - 2 days were collected. Parents could choose for their daughters not to take part with the aid of signing and returning a 'non-participation' section of the parent information sheet. Most effective 45 'Non-participation' forms from parents were sent back to the researcher. Statistical analysis was performed by using the Statistical Package for Social Sciences (SPSS) version 17. Normality of data was checked by applying one-sample Kolmogorov-Smirnov Test and result was normal. Descriptive statistics was used to find the prevalence of menstrual disorders and their association with demographics of respondents was conducted by using Chi-square Test. P value equal to and less than .05 was taken as significant.

RESULTS: In total, 1000 questionnaires were distributed, 62 girls refused to participate, 132 participants did not return the questionnaire. 56 questionnaires were not properly filled and 27 participants have underlying medical disorders, so those questionnaires were excluded from the study for further analysis. The remaining 723 female students successfully completed and returned the questionnaires, giving the response rate of 72.3%.

Demographic Characteristics of Participants: The general characteristics of the participants and their association with different menstrual problems are shown in **Table 1**. Results showed that 39 (5.4%) respondents were between 10 - 12 age group, 450 (62.2%) between 13 - 15 age group, 223 (30.8%) between 16 - 18 age group and 11 (1.5%) above 18 years. A significant relationship was found between age and dysmenorrhea ($P < 0.001$), irregular menstruation ($P = 0.001$) and secondary amenorrhea ($P = 0.005$).

A total of 30 (4.1%) respondents had their BMI <18, 395 (54.6%) respondents have their BMI in the range of 18.5 - 24.9 *i.e.* they were having their BMI in healthy range while 174 (24.1%) had BMI in the range 25 - 29.9 while 124 (17.2%) had BMI >30. The significant relationship was observed between BMI and dysmenorrhea ($P = 0.004$) and regular menstruation. ($P = 0.013$). A total of 90 (12.4%) participants were from lower class, 493 (68.2%) belonged to middle class while 140 (19.4%) from upper class. A enormous relationship was found with regularity of cycles and economic status ($P < 0.001$). The stated age of initation of menstruation was 10 years in 8 (1.1%), 11 years in 68 (9.4%), 12 years in 256 (35.4%), 13 years in 218 (30.2%), 14 years in 146 (20.2%) and 15 years in

27 (3.7%) of students. There was a significant relationship between the menarrcheal age and amenorrhea (P = 0.02), regularity of cycles (P < 0.001) and dysmenorrhea (P < 0.001). A total of 456 (63%) students were from private schools while 267 (36.9%) belonged to public schools. There was a significant relationship between the schooling and amenorrhea (P = 0.002), regularity of cycles (P= 0.007) and dysmenorrhea (P < 0.001).

TABLE 1: DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS

Variables	F (%) (N=723)	Irregular cycles p value	dysmenorrhea p value	Sec. amenorrhea p value
Age		0.001*	<0.001*	0.005*
10-12	39(5.4)			
13-15	450(62.2)			
16-18	223(30.8)			
>18	11(1.5)			
Body mass index		0.013*	0.004	0.5
<18	174(24.1)			
18.5-24.9	395(54.6)			
25-29.9	124(17.2)			
>30	30(4.1)			
Economic status		<.001*	0.6	0.099
Lower class	140(19.4)			
Middle class	493(68.2)			
Upper class	90(12.4)			
Menarrcheal age (years)		<.001*	<.001*	0.02*
10	8(1.1)			
11	68(9.4)			
12	256(35.4)			
13	218(30.2)			
14	146(20.2)			
15	27(3.7)			
School		.002	.007*	<.001
Private	456(63)			
Public	267(36.9)			

Prevalence of Menstrual Disorders: Prevalence of menstrual disorders is depicted in **Table 2**. Typical menstruation consisted of: regular menses in 43% (n = 311) of girls and irregular menses in 56.9% (n = 412); a cycle length ranging from 21 - 29 days for 50.3% (n = 364); and menstrual bleeding of 41.8% students lasts for 5 days while 36.2% students have this duration for almost 7 days. 33.5% students experiencing regular menses after menarche while 44.8% students experiencing irregular menses even after six months of menarche. A proportion of students (13.3%) reported hypomenorrhoea, *i.e.* duration of menstruation usually < 3 days, and 36.2% experienced hypermenorrhoea, *i.e.* duration usually > 7 days. According to the number of pads used during a cycle, 22.8% of women reported hypomenorrhea *i.e.* Very light menstrual bleeding (< 1 pad daily) and 12.2 % had heavy bleeding (>5 pads daily). While 43.6% women experience regular bleeding. 87.8% students had not experienced premenstrual bleeding. 12.2% women had been experiencing secondary amenorrhea from last three months

Experience of Symptoms among Respondents Suffering from Dysmenorrhea: Experience of symptoms among respondents suffering from dysmenorrhea is depicted in **Table 3**. Results showed that 44.4% of participants were always experienced pain during menstruation while 13.8% students experienced pain in most of the time of menstruation. 25.9% women usually felt reduction in pain when lie still while 26.1% women never felt the effect of posture on pain reduction. Majority of students (65.1%) never experience nausea during menstruation. However 8.3% women always experienced nausea during menstruation. 32.8% women always restrict specific diet during menstruation.

TABLE 2: PREVALENCE OF MENSTRUAL DISORDERS

Variables	Frequency (%)
Menstrual cycle	
Regular	311(43)
Irregular	412(56.9)
Length of menstrual cycle	
21- 24 days	118(16.3)
25-28 days	246(34)
29-32 days	249(34.4)
more than 32 days	110(15.2)
Duration of menses periods	
<3 days	96(13.3)
5 days	302(41.8)
7 days	262(36.2)
Others	63(8.7)
Experiencing regular menses	
after menarche	242(33.5)
within six months	157(21.7)
irregular even after 6 months	324(44.8)
No of pads used/day	
<1	165(22.8)
>3 pads	315(43.6)
>5 pads	88(12.2)
others	155(21.4)
Premenstrual spotting	
Yes	88(12.2)
No	635(87.8)
Secondary amenorrhea	
Yes	88(12.2)
No	635(87.8)

Of 723 participants, 97 never experienced pain. From remaining 626 participants, 14.3% (n = 90), always take medicines for relieving pain. While majority of participants (48.8%) never take medicines for relieving pain. 320 participants take medicines for relieving pain. From them, 30.8% found medicines are always effective for relieving pain while 5.3% participants thought medicines are never effective for relieving pain. 39.6% women sometimes found medicines effective. 35.4% respondents had never felt the effect of stress on pain. Of the 86.6% of girls who reported pain with menstruation, nearly 33.1 % of the respondents (n = 240) reported mild pain, 31.4 % (n = 227) reported moderate pain and 22 % (n = 159) reported severe pain.

Experience of Symptoms among Respondents Suffering from Premenstrual Syndrome: Symptoms among respondents suffering from premenstrual syndrome are depicted intable-4. Premenstrual symptoms were present in girls. The most common symptom was premenstrual mood swings which were experienced by 118 girls. And following it was premenstrual migraine which was frequently observed in 62 girls. 25% people always experienced premenstrual acne and 75% people experience effect of stress on premenstrual symptoms.

TABLE 3: EXPERIENCE OF SYMPTOMS AMONG RESPONDENTS SUFFERING FROM DYSMENORRHEA

Variables	Frequency
Pain	
Always	321(44.4)
Usually	100(13.8)
Sometimes	205(28.4)
Never	97(13.4)
Effect of posture	
Always	20(2.8)
Usually	187(25.9)
Sometimes	86(11.9)
Never	189(26.1)
Nausea	
Always	60(8.3)
Usually	52(7.2)
Sometimes	140(19.4)
Never	471(65.1)
Dietary restriction	
Always	234(32.4)
Usually	91(12.6)
Sometimes	172(23.8)
Never	226(31.3)
Take medicine (n=626)	
Always	90(14.3)
Usually	63(10.1)
Sometimes	167(26.6)
Never	306(48.8)
Are medicines effective(320)	
Always	98(30.6)
Usually	78(24.4)
Sometimes	27(39.6)
Never	17(5.3)
Effect of stress on pain?	
Always	133(18.4)
Usually	96(13.3)
Sometimes	238(32.9)
Never	256(35.4)
Severity of pain	
no pain	97(13.4)
mild pain	240(33.1)
moderate pain	227(31.4)
severe pain	159(22)

179 girls always experienced the presence of clots during menstrual bleeding while 262 girls (36.2%) sometimes experienced them during menstruation. 77.9% never visit to gynecologist while only one percent girls always visit gynecologist when they experience any menstrual related problems.

Correlation between Dependent and Independent Variables: Table 5 shows the correlation between dependent variables (irregular cycles and dysmenorrhea) and independent variables (secondary amenorrhea, visit to gynecologist, severity of pain, presence of clots and menstrual cycle length). Results showed that irregular cycles and dysmenorrhea have significant relation with duration of menses (P = 0.02, 0.021), length of menstrual cycle (P < 0.001, P < 0.001),

secondary amenorrhea (P < 0.001, P < 0.001), presence of clots (P < 0.001, P < 0.001), visit to gynecologist (P = 0.005, P < 0.001) and severity of pain (P < 0.001, P < 0.001).

TABLE 4: EXPERIENCE OF SYMPTOMS AMONG RESPONDENTS SUFFERING FROM PREMENSTRUAL SYNDROME

Variables	Frequency (%)
Breast tenderness	48(6.6)
Always	42(5.8)
Usually	148(20.5)
Sometimes	485(67.1)
Never	
Premenstrual migraine	
Always	62(8.6)
Usually	61(8.4)
Sometimes	197(27.2)
Never	403(55.7)
Premenstrual acne	
Always	25(3.5)
Usually	24(3.3)
Sometimes	128(17.7)
Never	546(75.5)
Premenstrual bloating	
Always	45(6.2)
Usually	42(5.8)
Sometimes	122(16.9)
Never	514(71.1)
PM mood swings	
Always	118(16.3)
Usually	29(4)
Sometimes	285(39.4)
Never	291(40.2)
Visit to gynecologist	
Always	7(1)
Usually	27(3.7)
Sometimes	126(17.4)
Never	563(77.9)
Presence of clots	
Always	179(24.8)
Usually	95(13.1)
Sometimes	262(36.2)
Never	187(25.9)
Effect of stress on PM symptoms	
Always	75(10.4)
Usually	60(8.3)
Sometimes	157(21.7)
Never	431(59.6)

TABLE 5: CORRELATIONS AMONG MENSTRUAL DISORDERS

Variable	Association with dysmenorrhea p value	Association with irregular cycles p value
Duration of menses	0.02	0.021
Length of menstrual cycle	<0.001	<0.001
Secondary amenorrhea	<0.001	<0.001
Presence of clots	<0.001	<0.001
Visit to gynaecologist	0.005	<0.001
Severity of pain	<0.001	<0.001

Menstrual Interference with Life Activities: Menstrual interference with life activities is described in **Table 6**. Although menstruation on its own caused major interference with attending school for 450 (62.2%) respondents, effect on school work 113 (15.6%), relationship with friends 125 (17.3%), sports and exercise among 230 (31.8%) and social activities among 185 (25.5%) girls.

TABLE 6: INTERFERENCE OF MENSTRUATION WITH LIFE ACTIVITIES

Activities	Major interference F (%)	Minor interference F (%)	No interference F (%)
School attendance	450(62.2)	148(20.5)	125(17.2)
Effect on school work	113(15.6)	173(23.9)	437(60.4)
Relationship with friends	125(17.3)	198(27.4)	400(55.3)
Relationship with family	267(36.9)	138(19.1)	318(44.0)
Sports and exercise	230(31.8)	333(46.1)	160(22.1)
Social activities	185(25.5)	137(18.9)	400(55.3)

Fig. 1 shows the reasons of school absenteeism due to symptoms associated with menstruation. 273 girls miss their schools due to severe pain while 92 girls miss it because of heavy bleeding. 149 girls did not miss their schools during menstruation.

Fig. 2 depicts the location of pain. Results showed that 97 women never experienced pain during menstruation. 284 experienced back pain while 107 reported abdominal pain. Many participants experienced pain at more than one location so they reported it accordingly. As 40 women experienced both backache and abdominal pain and 18 experienced abdominal pain that extends to thighs.

Fig. 3 shows the details of medicines used for relieving menstrual pain. Out of 626 participants who experienced pain during menstruation, 182 did not take medicines for relieving pain. 185 women took buscopan while 66 prefer ponston forte for relieving pain. Maximum number of respondents used panadol for relieving menstrual pain (203).

Fig. 4 depicts regularity of menstrual cycle. 56.9 % respondents experienced irregular menstruation while 43.1% people report that their periods are normal. Duration of menses periods is described in **Fig. 5**.

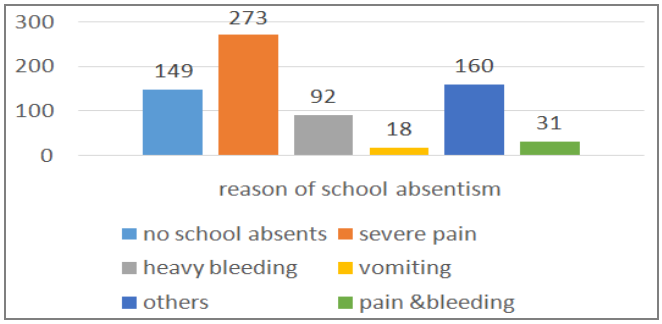

FIG. 1: LOCATION OF PAIN

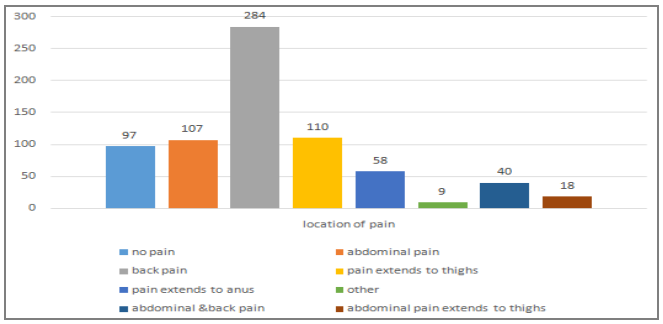

FIG. 2: REASON OF SCHOOL ABSENTISM

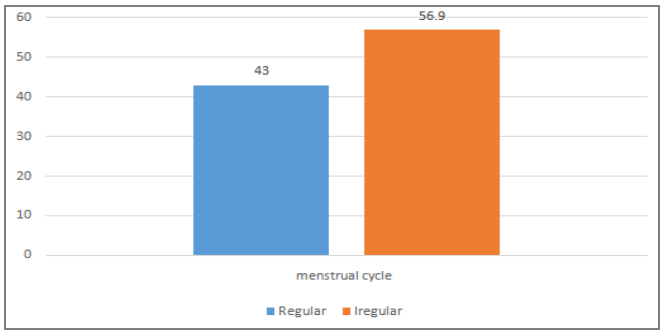

FIG. 3: REGULARITY OF MENTRUAL CYCLE

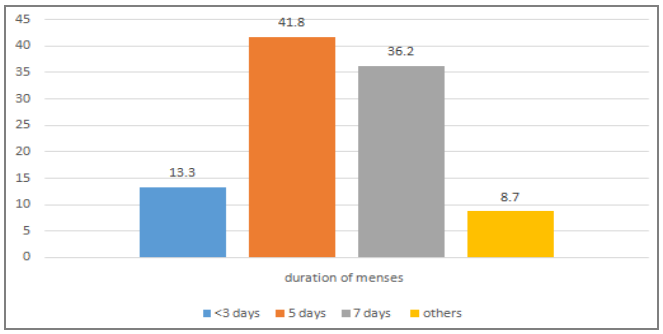

FIG. 4: DURATION OF MENSES PERIODS

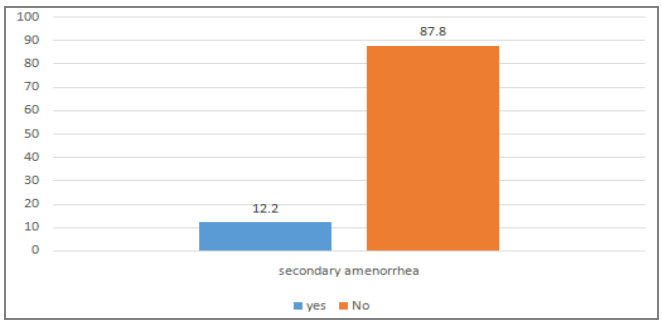

FIG. 5: SECONDARY AMENORRHEA

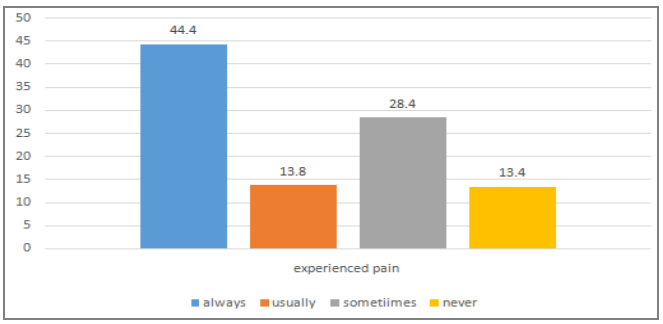

FIG. 6: RESPONDENTS EXPERIENCED PAIN DURING MENSTRUATION

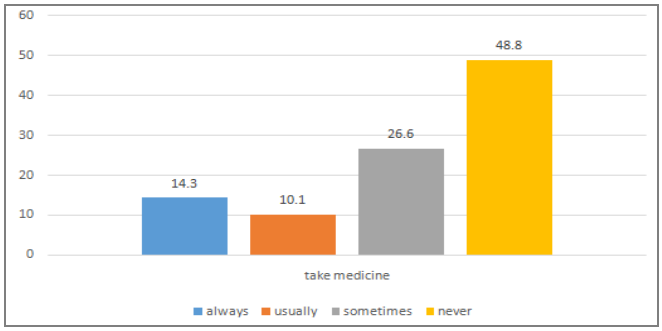

FIG. 7: PERCENTAGES OF RESPONDENTS WHO TAKE MEDICINES FOR RELIEVING PAIN

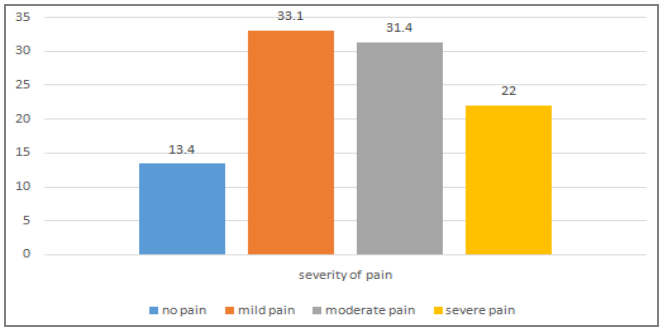

FIG. 8: SEVERITY OF PAIN DURING DYSMENORRHEA

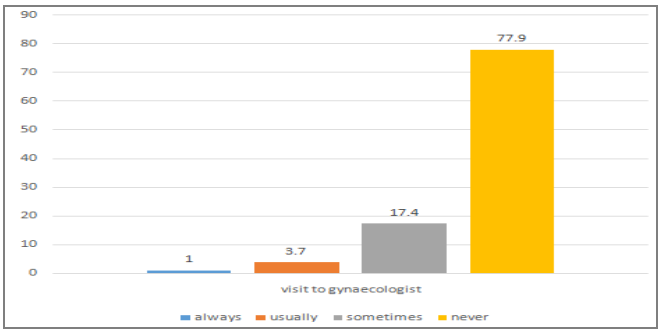

FIG. 9: VISIT TO GYNAECOLOGIST

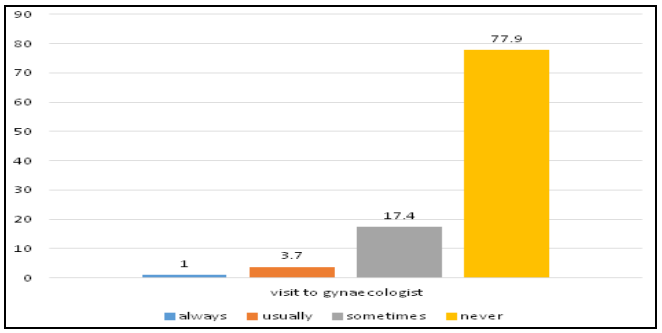

FIG. 10: VISIT TO GYNAECOLOGIST

Results showed that 13.3% adults bleed for less than three days. That may be an indication of hypo menorrhea. While 41.8% bleed for 5 days that's a normal menstrual bleeding range. 36.2% bleed for almost 7 days that may be an indication of hyper menorrhea. 87.8% respondents did not experience secondary amenorrhea while only 12.2% experienced secondary amenorrhea **Fig. 6**. 44.4% of study population always experienced pain during menstruation. 13.4% said they never experienced pain and 28.4% said they experienced pain only sometimes during menstruation. 13.8% said they experienced pain usually during menstruation **Fig. 7**. 8% never took medicines for relieving menstrual pain. 26.6% People sometimes took medicine for pain while 14.3 percent respondents report that they always took medicines during menstrual pain **Fig. 8**.

A total of 22% respondents experienced severe pain. 33.1% of people rate their menstruation as mild pain. 31.4% rate their pain as moderate pain. However, 13.4% people said they never experienced any pain during menstruation **Fig. 9**. If any problem experienced during menstruation, 77.9% population never visit gynecologist, 17.4% population sometimes consult gynecologist. However, only 1% population always consult gynecologist whenever they experienced any problem during menstruation **Fig. 10**.

DISCUSSION: Menstruation although a normal physiological process, is many times associated with premenstrual and menstrual disturbances. Those disturbances might also sometimes be very intense leading to loss of work days. An extremely high response rate was observed in this large population-based study. 'Typical' symptoms of menstruation in Pakistani teenage girls in terms of pain, signs and symptoms and menstrual disturbance become established. Menstruation is "dirty", is a social menstrual anathemas of our society. It is a general thinking of our society that it must be secreted and should not be discussed in public. This is not always unexpected, cultural beliefs about menstruation are usually quite negative [24, 25].

Study results showed that 36.2% girls have bleeding for more than 7 days in a month and that is an indicative of hypermenorrhea while 13.3% girls have bleeding for less than 3 days. It is an indicative of hypomenorrhea. A study in Labenese nursing students showed that hypomenorrhoea, was reported in small proportion of students *i.e.* duration of menstruation usually less than 3 days, and 11.6% experienced hypermenorrhoea *i.e.* duration usually greater than 7 days [4].

Dysmenorrhea is called a not unusual and important menstrual sickness in youth and common in women with ovulatory cycles. Among the female population it is an important public health problem. Among the respondents in the present study, prevalence of dysmenorrhea was 86.6% which was comparable to the results of a previous study i.e. 76.9%, conducted in India [26]. Daily activities are seriously affected by painful menstruation and premenstrual symptoms. In a study in Morocco, the major reason of school absenteeism between adolescent girls was painful menstruation [27].

In study population, dysmenorrhea was a significant problem with prevalence rate of 86.6% of respondents reporting varying extent of menstrual pain. El-Gilany [28] reported it 80% from a sample of 664 adolescents. In study, severe pain was reported by quarter of girls while 36.2% girls rate their menstrual pain as moderate pain. In India, the occurrence of dysmenorrhea was almost fifty percent but only 15% of adolescents which state their dysmenorrhic pain as severe [29].

There had been a few misconceptions observed concerning the restriction of certain meals all through dysmenorrhea. 32.4% and 12.6% respondents always and usually followed dietary restrictions respectively. They follow these dietary restrictions based on their belief that it helps to reduce pain during menstruation. Consequently, it is considerable to teach women about the ideal nutrition and food regimen consumption at some stage in menstruation despite having dysmenorrhea.

Majority of girls usually and sometimes believe that the posture have impact on menstrual pain. They reported that their menstrual pain usually and sometimes improved when they lie still and take rest. According to study results, adults applied a lot of measures to deal with menstrual problems that include medicines (67.7%), dietary restrictions (68.7%) and consulting a gynecologist (22.1%).

Similar to other studies [30, 31], Paracetamol and buscopan were the normally used analgesics. Because the powerful remedies for menstrual issues are available, approximately two thirds of all respondents self-medicated, one quarter stated that analgesics used for easing ache are less powerful and most effective 1% usually consulted their healthcare company for easing ache and 17.4% occasionally seek advice from their gynecologist. This latter percentage corresponds to other studies [31, 32]. It is of significant concern because such results show perception about these disorders. If these disorders are considered as normal and part of the daily physiologic process then adults may not get treatment for hidden gynaecologic conditions. Reasons of reluctance to access medical treatment should also be studied.

Although menstruation has a little impact on school attendance of menstruating girls but when study found association with menstrual pain, the school attendance is most particularly affected one in various six life activities. Fairly significant associations had been found among severity of pain, the wide variety of menstrual signs and symptoms experienced, interference with existence activities and college absence. Study end results showed that sufficient information was not available among the study participants. Unique techniques have to be used to offer health education to empower girls to use their knowledge to fitness seeking behaviors.

Health care providers need to work on growing the strategies to teach adolescent women about etiology, signs and symptoms and management of dysmenorrhea. Educating younger ladies about personal health behaviors and practices would now not only prevent infections however additionally be effective in reducing such type of ache and discomfort.

Irrespective of these findings, a number of the studies found out that women did not have appropriate know-how about the dysmenorrhea and menstrual duration hygiene, and as a result lead to bad practices. This portrays that their inadequate pubertal related fitness data can also lead dangerous fitness threat among this age group of women. Consequently, it is vital that fitness schooling have to be an imperative a part of college curriculum. Similarly, parents are desired to be advocated and suggested to engage in such form of open discussion with girls at proper and an appropriate age in an effort to lead them to aware since starting about the healthy practices associated with menstruation.

Correct education of the adolescent woman on menstruation is critical because some mis-conceptions exist inside the adolescent population about menstruation, a few perceive it as a bad or bizarre component; others consider it as horrifying or an embarrassing revel in schooling on menstruation must therefore goal each the adolescent and person populace the use of fitness institutions, schools, print and digital media.

This approach to menstrual schooling will remove a few misconceptions about menstruation and ensure that certain unfounded believes are not handed on from generation to generation where only mother and father have been worried. Moms are of critical significance and are also the desired source of training on menstrual hygiene and emotional support to daughters inside the circle of relatives since many daughters find it uncomfortable discussing this topic with their fathers. When girls start menstruating without sufficient and correct statistics; They will suffer unnecessary morbidity related to their menstrual cycles such as irregular cycles, dysmenorrhoea, heavy menstrual flow and undesirable pregnancies all of which might be nicely understood and averted or controlled if correct records on menstruation is disseminated

In précis, in growing countries like Pakistan, menstrual morbidity is a chief unmet place of reproductive health services emphasis should be on diagnosis and treatment of menstrual complaints. Simple and less expensive remedies are presently available for menstrual complaints. In efforts to lessen menstrual associated problems monitoring of menstrual symptoms can be crucial. Extra attention need to particularly receive to improve the training of primary care and reproductive fitness professionals about the diagnosis and treatment of menstrual morbidities. Diagnosis and treatment recommendations need to be developed which might be appropriate for use in developing countries.

CONCLUSION: Adolescent menstrual disorders are exceptionally not unusual, study reported higher than predicted incidence of menstrual issues. Expertise regarding the factors influencing menstrual symptoms is critical as a way to manage it correctly and assist the girls to make up the days less troublesome and tolerable. A selection of factors is recognized to affect menstrual behaviors, the most influential ones being economic popularity. Absenteeism from the school changed into the impact of menstruation related problems on their each day recurring. Dysmenorrhea and premenstrual symptoms had been perceived as maximum distressing symptoms leading to school absenteeism and of days off work. Women with premenstrual signs and symptoms have suggested a greater number of days with impairment in recurring work, school and household activities

ACKNOWLEDGEMENT: Nil

CONFLICT OF INTEREST: Authors declare no conflict of interest.

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How to cite this article:
Zafar M, Sadeeqa S, Latif S and Afzal H: Pattern and prevalance of menstrual disorders in adolescents. Int J Pharm Sci & Res 2018; 9(5): 2088-99. doi: 10.13040/ IJPSR.0975-8232.9(5).2088-99.