



**PRIMARY DYSMENHORREA, ITS EFFECTS AND REMEDIES USED
AMONG YOUNG FEMALES OF DIFFERENT UNIVERSITIES IN
KARACHI, PAKISTAN**

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ABSTRACT

This study was conducted to reveal primary dysmenorrhea and its effects in young females belonging to various universities in Karachi, Pakistan. Remedies used to alleviate the undesired effects were also determined using a structured questionnaire. A structured questionnaire was filled by 621 subjects in the presence of the study researchers after taking their consent. The survey was conducted from March to May 2012. The results of the study showed that dysmenorrhea was mild in 28.8% (n=179), moderate in 36.9% (n=229) and severe in 15.8% (n=98) subjects. The age of menarche of majority of the females was 12-15 years with 85% (n=528) having regular and 15% (n=93) having irregular menstruation. The most frequently reported associated symptoms were abdominal pain in 75.04% (n=466) females, headache in 15.62% (n=97), nausea in 20.45% (n=27) and vomiting in 7.41% (n=46) females. Only 9.33% (n=58) of the females consulted physicians, 33.5% (n=208) self medicated and 66.3% (n=412) took no action for their pain. Conventional medicine was used by 26.41% (n=164) females, household remedies by 9.02% (n=56), herbal by 2.89% (n=18) and homeopathic by 2.41 % (n=15) females. Paracetamol, ibuprofen and mefenamic acid were reported as commonly used allopathic medicines for dysmenorrhea; green tea, black caraway, coriander/ginger tea were used as herbal remedies whereas hot milk, boiled eggs and hot water bottles were used as household remedies by the participating females. Dysmenorrhea also affected different activities and performances of 52.3% (n=325) subjects; stress and depression affected 33.17% (n=207) subjects. Various symptoms contribute to severity of primary dysmenorrhea in which abdominal pain, headache and nausea are prevalent among the females. Due to this, activities and performances of young females are disturbed to quite much extent. The need for awareness regarding primary dysmenorrhea among young females is necessary and should be addressed by health care professionals and health related educational programs.

Keywords: Dysmenorrhoea, menstruation, menstrual pain

INTRODUCTION

Dysmenorrhoea is considered as a very common gynecological problem. It is often described as crampy, colicky pain in the suprapubic region radiating to the lumbosacral region or the anterior thigh. It usually begins at the start of menstruation and continues for a few days [1]. It may be categorized into two distinct types: (i) Primary dysmenorrhoea is menstrual pain without pelvic pathology, with onset typically just after menarche

and (ii) Secondary dysmenorrhoea is menstrual pain associated with under-lying pathology and onset may be years after menarche [2]. In various articles about dysmenorrhoea, it is mentioned that it is typical in young, nulliparous women. About 50% of them suffer from pain during menstruation and some 10-20% show absenteeism from work for 1 or 2 days each or every second menstruation [3-4]. In primary dysmenorrhoea, there is an increased local secretion of vasopressin and prostaglandins, both PGF_{2α} and PGE₂. These hormones have a profound effect on the

myometrium and the smooth muscles of the arterial walls. Hence, concentrations of prostaglandins (PG) in menstrual blood are significantly increased compared to those in women without dysmenorrhea as a result of endometrial synthesis and release of PGs [5-6]. It is, therefore, logical that in the clinical management of both primary and secondary dysmenorrhea, non-steroidal anti-inflammatory drugs offer a valid treatment. However, the treatment is less effective if the intake of the drug is delayed until the pain is more severe and side effects can also occur especially in women with asthma, allergic disorders and peptic ulcers [7]. Surveys in Pakistan have found the prevalence of premenstrual symptoms, varying from 53% to 67% in college girls [8-10]. About 57% of students in a study reported that dysmenorrhoea affected their work [9]. Although these surveys document the prevalence and severity of symptoms, they do not correlate it with the impact of specific symptoms on daily activities or with healthcare seeking behavior. A population-based survey of 2262 women from Goa (India) revealed a linear association between pain severity and treatment seeking and time off from work [11].

METHOD

A questionnaire based survey was conducted among 621 young females belonging to various universities in Karachi, aged 17-24 years. The questionnaire was explained to the participants and was filled after taking their consent in the presence of the researchers. The weight and height of participants were also measured by the researchers. Exclusion criteria for the study were pregnancy and any gynecological or medical condition. In this study, information on subjects' demographics, prevalence of dysmenorrhoea, its effects and the remedies used were assessed. Results were calculated via SPSS version 16.0.

RESULTS AND DISCUSSION

Dysmenorrhea is a prevalent and yet under treated menstrual disorder. There is a need for education regarding dysmenorrhea and treatment options to minimize its impact on various daily activities [12]. The results revealed that 81.48% (n=506) out of 621 participants had dysmenorrhea. It was mild in 28.8% (n=179), moderate in 36.9% (n=229) and severe in 15.8% (n=98) females. Only 9.33% (n=58) females consulted a physician, 33.5% (n=208) self-medicated and 66.3% (n=412) took no action for their condition. Treatments sought were: conventional medicine by 26.41% (n=164), household remedies by 9.02% (n=56), herbal remedies by 2.89% (n=18) and

homeopathic medicines by 2.41% (n=15) females (Figure 1). All the participants with dysmenorrhea reported some associated symptoms in which the most frequent were abdominal pain in 75.04% (n=466), headache in 15.62% (n=97) and nausea in 20.45% (n=127) (Figure 2). Some studies have also shown a link between dysmenorrhea and various associated risk factors i.e. early menarche, irregular or long cycles and heavy menses [4, 13]. As shown in Table 1, the menarche age of majority of the females is 80.2% (n=498) belonging to 12-15 years of age. 85% (n=528) reported regular periods whereas irregular periods were reported by only 15% (n=93) females. In 76.2% (n=473) females, 22-34 days of period cycle is observed while in 18.7% (n=116) females, cycle of < 21 days is observed. Menstrual flow was normal in 77.55% (n=481) females, 11.4% (n=71) females reported heavy flow whereas 10% (n=62) reported light flow. About 1.45% (n=9) subjects reported clots during their menstrual cycle. The BMI of the participants was also recorded; normal in 72.9% (n=453) females, underweight in 21.7% (n=135) and over weight in only 5.3% (n=33) females. In the study 96.6% (n=600) females were unmarried whereas 3.4% (n=21) were married. About 91.1% (n=566) females belonged to middle socio-economic class, 7.6% (n=47) belonged to upper class and 1.3% (n=8) females belonged to lower class. Smoking was reported by 1.44% (n=9) subjects only. Consumption of various articles by participants having dysmenorrhea is shown in Fig. 3 from which it can be seen that tea was consumed by 82.29% (n=511), coke/pepsi was consumed by 29.15% (n=181), chocolate by 30.91% (n=192) and coffee was consumed by 12.07% (n=75) females.

CONCLUSION

Abdominal pain, headache and nausea contribute the most to severity of dysmenorrhoea. Conventional medicine is commonly used by the affected females. Effective treatments for the relief of menstrual symptoms remain underutilized causing avoidable suffering. Hence, it is evident that dysmenorrhoea is a prevalent and yet undertreated menstrual disorder among young females in Karachi. There is a need for education regarding dysmenorrhoea and treatment options to minimize the impact on different activities in the daily life. Further research in this area should focus on awareness, access to care, and quality of life outcomes with different treatment options.

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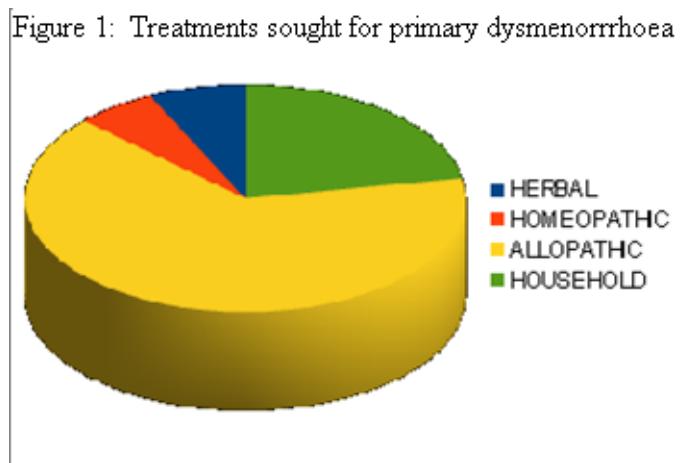


Figure 2: Symptoms reported in primary dysmenorrhoea

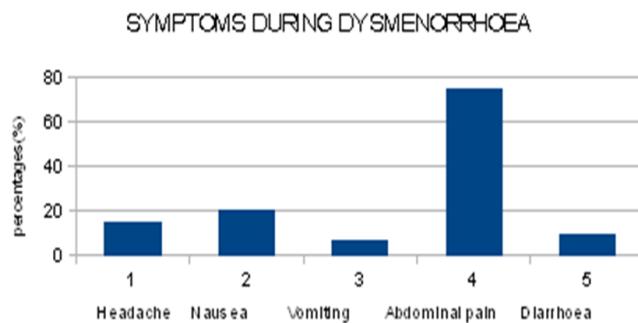
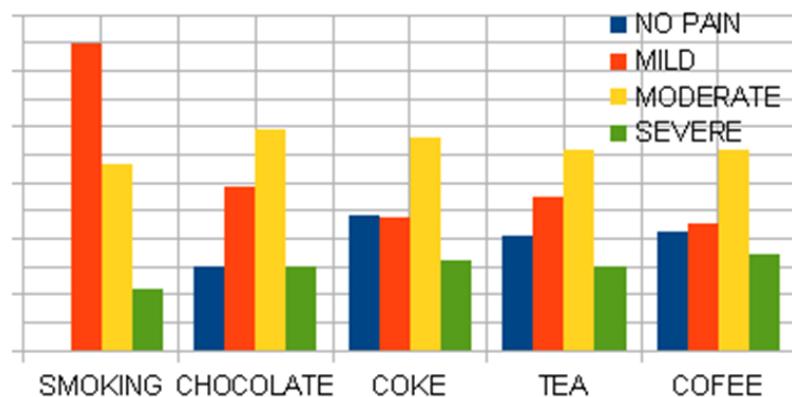
**Figure 3: Consumption of various articles by participants with dysmenorrhoea**

Table 1: CORRELATION OF SOME CHARACTERS IN FEMALES WITH OR WITHOUT PRIMARY DYSMENORRHEA

DYSMENORRHEA					
	NO (%)	MILD (%)	MODERATE (%)	SEVERE (%)	TOTAL (%)
MENARCHE:					
<12 YRS	11(12.79)	26 (30.23)	37 (43.02)	12 (13.85)	86 (13.8)
12-15YRS	97 (19.48)	142 (28.51)	176 (35.31)	83 (16.86)	488 (80.2)
>15 YRS	7 (18.92)	11 (29.73)	16 (43.24)	3 (8.11)	37 (6.0)
MENSTRUAL CYCLE: (DAYS)					
<21 days	22(18.97)	37 (31.89)	38 (32.75)	19 (16.38)	116 (18.77)
22-34	88(18.60)	136 (28.75)	177 (37.42)	72 (15.22)	473 (76.2)
>35	5 (15.62)	6 (18.77)	14 (43.75)	7 (21.87)	32 (5.2)
MENSTRUAL FLOW:					
heavy	5 (7.04)	8 (11.26)	23 (32.39)	35 (48.29)	71 (11.4)
normal	95 (19.75)	145 (30.14)	190 (39.5)	51 (10.60)	481 (77.55)
light	15 (24.11)	24 (38.71)	15 (24.19)	8 (12.90)	62 (10)
clot	0(0)	2 (22.22)	1 (11.11)	4 (44.44)	9 (1.45)

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