

A Study of Incidence of Gynaecological Problems and Dysmenorrhoea in Adolescent Girls at Tertiary Care Center

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Abstract

Background: Adolescence is a period of transition between childhood and adulthood. WHO defines adulthood as individual in the age group 9-19 yrs. Complex neuroendocrine mechanism accelerates physical and emotional development. This may be considered a physical, psychological and emotional rebirth. This age group has distinct reproductive health issues which should be diagnosed and treated promptly because reproductive health problems at this age have the potential of affecting future fertility. The present study aims to assess the magnitude and variety of gynaecological problems in adolescents. *Material and Methods:* Two hundred adolescent girls in age group 10-19 years, attending Gynaecology OPD in ACPM Medical College, Dhule during December 2015 to May 2016 were included in this study. Questionnaire were adopted as a quantitative research tool. *Results:* Among gynaecological problems experienced by adolescent girls menstrual disturbances were experienced by majority of girls 147 (73.5%) followed by pain in lower abdomen 82 (42.5%), and obesity 8 (4%) and lump in abdomen 3 (1.5%) were the least symptoms. Majority of the adolescent girls with menstrual disturbances had experienced dysmenorrhea, that is, 102 out of 147 (69.38%). *Discussion:*

Menstrual disturbances is a common reproductive morbidity among adolescent girls. Dysmenorrhea is very common among these girls and they experience a number of physical and emotional symptoms associated with dysmenorrhea, and with the increased intensity of pain in occurrence of dysmenorrhea, the probability of experiencing these symptoms is also increased. Health education sessions regarding reproductive health and its morbidities should be conducted in schools and colleges and in communities.

Keywords: Adolescent Girls; Menstrual Disturbances; Dysmenorrhoea; Health Education.

Introduction

According to WHO definition adolescents are the individuals in the 10-19 years' age group [1]. Adolescence is a period of transition from childhood to adulthood and is characterized by a spurt in physical, endocrinal, emotional and mental growth, with a change from complete dependence to relative independence[2]. This transition phase makes them vulnerable to a number of reproductive and psychosocial health problems. Adolescents from this age group constitute almost one-fifth of the world's total population. Almost a quarter of India's population comprises of girls below 20 years of age [3].

This age group has distinct reproductive health issues such as such as dysmenorrhoea, other menstrual disturbances, leucorrhoea, mastalgia and pre-menstrual syndromes etc., which should be diagnosed and treated promptly because reproductive health problems at this age

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have the potential of affecting not only their own health, but also the health of future generation.

Adolescent girls in India are traditionally been shy and hesitant in discussing gynaecological health problems and concerns. Therefore, majority of the adolescent girls in India suffer from reproductive health morbidities [4,5].

In this study, an attempt has been made to assess the magnitude of gynaecological problems and study incidence and pattern of menstrual disturbances in the adolescent population attending the gynaecological outpatient department.

Material and Methods

Two hundred adolescent girls attending OPD of Gynaecology Department, ACPM Medical College, Dhule from December 2015 to May 2016 were included in the study. Only unmarried adolescent girls in age group 10-19 years and willing to participate in the study were included in the study.

All adolescent girls included in the study group were suffering from various clinical disorders like menstrual disturbances, acne, hirsutism, per vaginal discharge, pruritus vulva, breast disease, weight problem and pain in lower abdomen. A detailed history of gynaecological problems and other associated problems were taken explaining the objectives. In addition to the general examination, height, weight, secondary sex characteristics were recorded. Investigations like complete blood count, routine urine, hormonal assays (FSH, LH, Prolactin,

TSH) and pelvic ultrasound were done.

Questionnaire were adopted as a quantitative research tool. The tool developed was a dysmenorrhoea status questionnaire with a total of 8 symptoms. The symptoms included were presence and absence of depression, irritability, constipation, frequency of micturition, profuse sweating, feeling of heaviness in lower abdomen, fullness and tenderness in breasts and nausea, vomiting on day before, first day and day after stoppage of menstruation.

Results

Among gynaecological problems experienced by adolescent girls menstrual disturbances were experienced by majority of girls 147 (73.5%) followed by pain in lower abdomen 82 (42.5%), and obesity 8 (4%) and lump in abdomen 3 (1.5%) were the least symptoms (Table 1). Majority of the girls (61.9%) experiencing menstrual disturbances were in age group of 15-19 years.

Dysmenorrhoea was found to be a very common problem among adolescent girls. Majority of the adolescent girls with menstrual disturbances had experienced dysmenorrhoea, that is, 102 out of 147 (69.38%), as shown in Table 2. Further analysis was conducted to find out how frequently they experienced dysmenorrhoea. The maximum number of girls, that is, 59 out of 91 girls (57.8%) experienced dysmenorrhoea every month, and 18 (17.6%) experienced it in most of the months, and it was statistically highly significant ($P < 0.001$).

Table 1: Gynaecological problems in adolescent girls

Gynaecological problem	Number (n=200)*	Percentage
Menstrual disturbances	147	73.5
Pain in lower abdomen	85	42.5
Acne / Hirsutism	67	33.5
Leucorrhoea	47	23.5
Pruritus vulva	33	16.5
Mastalgia	24	12.0
Obesity	08	4.0
Lump in abdomen	03	1.5

*Multiple responses allowed

Table 2: Age in years and menstrual disturbances in adolescent girls (n=147)

Menstrual disturbances	Age in years		Total n=147	P value
	10-14 (n=56)	15-19 (n=91)		
Dysmenorrhoea	28 (50%)	74 (81.3%)	102 (69.4)	<0.01
Menorrhagia	08 (13.8%)	13 (14.3%)	21 (14.3)	<0.01
Irregular cycles	05 (8.9%)	02 (2.2%)	07 (1.6)	<0.01
Pre-menstrual syndromes	06 (10.7%)	11 (12.1%)	17 (11.6)	<0.01

Table 3: Frequencies and percentage of adolescent girls experiencing dysmenorrhoea

Dysmenorrhoea status	Frequency (n=102)	Percentage
Dysmenorrhoea every month	59	57.8
Most of the months	18	17.6
Occasionally	28	27.4
Rarely	42	41.1

Total girls= 200; Dysmenorrhoea 'Yes' group n=102; No dysmenorrhoea group= 98

Table 4: Association between psychological, emotional, physical symptoms and intensity of pain during dysmenorrhoea (n=147)

Variable	Day before menstruation	First day of menstruation	Day after stoppage of menstruation
	Cases (%)	Cases (%)	Cases (%)
Depression	21 (18.6)	48 (42.5)	14 (12.4)
Irritability	24 (21.2)	39 (34.5)	6 (5.3)
Constipation	12 (10.6)	5 (4.4)	3 (2.65)
Frequency of micturition	18 (15.9)	22 (19.5)	4 (3.5)
Profuse sweating	19 (16.8)	16 (14.1)	2 (1.8)
Fullness and pain in breast	14 (12.4)	12 (10.6)	4 (3.5)
Heaviness in lower abdomen	23 (20.4)	44 (38.9)	8 (7.1)
Nausea, vomiting	16 (14.1)	22 (19.5)	5 (4.4)

Significantly more girls with dysmenorrhea experienced constipation, fullness and/or pain in breast and heaviness in lower abdomen on the day before menstruation, while they experienced frequency of micturition, irritability, profuse sweating and nausea and vomiting on the first day of menstruation. All the psychological symptoms were closely associated with the occurrence of dysmenorrhea and intensity of pain, both on the day before and after the stoppage of menstruation. On the day after the stoppage of menstruation the symptom of 'irritability' was found to be associated with the occurrence of dysmenorrhea, and depression was found to be associated with the intensity of pain (Table 4).

Discussion

One of the major physiological changes that take place in adolescent girls is the onset of menarche, which is often associated with problems of irregular menstruation, excessive bleeding, and dysmenorrhea. Of these, dysmenorrhea is one of the common problems experienced by many adolescent girls. Reproductive morbidities were highly prevalent among adolescent girls and 73.5% of adolescent girls reported menstrual disturbances as reproductive morbidity in the present study.

Dysmenorrhoea was the most common reproductive morbidity among 69.3% girls. A variable

prevalence of dysmenorrhoea (62.5% to 84%) was reported in various studies by Agrawal Set al., Sharma et al., Deo and Ghattargi, Agarwal A and Venkant, Jayashree and Jayalakshmi (74%) [4-8]. Prevalence of dysmenorrhoea was high in late adolescent age group (81.3%) in present study. Rehman et al. also reported similar study findings [9].

The psychological, emotional and other physical symptoms, similar to the ones found associated with dysmenorrhea in the present study, were reported by George and Bhaduri, Agarwal and Agarwal [10,11].

Adolescent girls, almost always, silently suffer the pain by dysmenorrhea and the discomfort associated with it due to lack of knowledge about reproductive health. From the study it can be concluded that dysmenorrhea is a very common problem among adolescent girls, and they experience a number of physical and emotional symptoms associated with dysmenorrhea, and with the increased intensity of pain in occurrence of dysmenorrhea the probability of experiencing these symptoms is also increased. It can be included as a part of school health programme. Health education sessions regarding reproductive health and its morbidities should be conducted in schools and colleges and in communities.

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None

Conflict of Interest

None to declare

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