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Original Research Article

Frequency and pattern of gynecological problems of adolescent girls attending outpatient department, department of obstetrics and gynecology, Bangabandhu Sheik Mujib Medical University, Bangladesh

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ABSTRACT

Background: Adolescent is a stage of development tangent, like a bridge of childhood and adulthood. It is the healthiest age group of our society which is almost 20% of our total population. World health organization (WHO) defines adolescents are in the 10-19 year in age group. 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.
Methods: This cross-sectional observational study was carried out in 668 female adolescent aged 10-19 years irrespective of their marital status visiting the OPD of obstetrics and gynecology department of BSMMU. All data was analyzed using SPSS program version 22.0.
Results: Results were expressed in frequencies or percentages. Of the 668 adolescent girls, 418 (62.6%) had different type of menstrual disorder. Of these 418 cases about 127 (30.38%) of them were a case of puberty menorrhagia, 109 (26.07%) cases were oligomenorrhoea and 91 (21.77%) were amenorrhea. Other presentations were pre-vaginal discharge, vulval itching, lower abdominal pain, dysuria, feeling lump in lower abdomen, mastalgia, feeling lump in the breast, discharge from breast, acne, hirsutism.
Conclusions: This study shows more than half of adolescent girls are having menstrual disorder. Adolescent gynecology needs increased awareness and greater attention to improve the quality of their life. Setting up a separate adolescent clinic is necessary for efficient management of adolescent problem.

Keywords: Gynecological problems, Adolescent, Frequency

INTRODUCTION

Adolescence is a period of enormous physical and psychological change for young girls. As per World health organization (WHO), adolescence includes the age group of 10–19 years. Adolescents constitute 20.0 % of our total population and representing almost one-fifth of the world's population.[1] Adolescence is a transition period 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] Adolescent gynaecology is a sub-specialized area of gynaecology which has still not been explored optimally. In this study reviewed the clinical problems of the adolescent attending the gynaecological outpatient department (OPD) at Bangabandhu Sheik

Mujib Medical University (BSMMU), Dhaka, Bangladesh. In this age physical nature of problem is unique an emotional and psychological factor are also associated. Usually they are shy and do not share their problems with their friends and even parents. In developing countries, reproductive morbidity commonly affects the quality of women's lives. This form of ill health has largely been ignored by the policy makers, health planners as well as researchers. The reproductive morbidity includes the obstetric and gynaecological conditions of ill health related to the reproductive process during and outside the childbearing episodes. The obstetric morbidity encompasses the conditions during pregnancy, delivery and post-partum period and gynaecological morbidity includes the conditions outside pregnancy related events.[3] In this part, the reproductive morbidity refers to gynaecological morbidity of ill health unrelated to pregnancy. There are three methods for the diagnosis of gynaecological morbidity such as self-reported symptoms, clinical examination and laboratory tests. Appropriate laboratory testing is considered as the "Gold standard" for the precise detection of reproductive morbidity and accurate measurement of prevalence of diseases. However, such tests have limited applicability in developing countries because they are expensive and present logistical difficulties.[4] Health facilities at the community level are poorly equipped to deal with reproductive morbidity, since they do not have diagnostic facilities, drugs, supply of blood or surgical equipment to treat the diseases. Even service providers are not well acquainted to detect the morbidity or to provide counselling. Information about reproductive morbidity in developing countries is scanty. Although a few studies have been conducted in this field but most of them are based on information obtained from clinics or hospitals. Large proportion of women does not visit health facilities unless the disease becomes serious. So, the results from hospitals or clinics do not reflect the magnitude of the disease burden. The statistics provided by the hospitals are based on biomedical causes only but information on social economic demographic and behavioural determinants are rare. In fact, a search of literature reveals that knowledge about reproductive morbidity and its determinants in Bangladesh and also in the sub-continent are almost non-existent. A few studies in this area showed a varying prevalence of reproductive morbidity and these mainly considered the adult women of reproductive age (Wasscrheitet al, 1989; Bhatia and Cleland 1995).[5-8] So the appropriate strategies are to be designed to bring about improvement in the reproductive health of women (Bhatia and Cleland 1995).[7] One study in Bangladesh revealed that a large proportion of adolescent (64.5%) reportedly has been suffering from gynaecological morbidity.[9] With these objectives in view the present study on self-reported reproductive morbidity among adolescents was undertaken.

METHODS

This study was carried out in female adolescent aged 10-19 years irrespective of their marital status visiting OPD of obstetrics and gynecology department of BSMMU from January 2017 to December 2017. 686 adolescent girls attending the gynecological outpatient department from January-2018 to December 2019 were include in the study. All adolescent girls coming to OPD were suffering from various clinical disorders like menstrual disorder, acne, hirsutism, per-vaginal discharge, anemia, breast disease abdominal lump and urogenital malformations etc. were included. A detailed history of gynecological problems and other associated problems were taken. In addition to the general examination, height, weight secondary sex characteristics were recorded. Investigations like complete blood count, hormonal assay (FSH, LH, Prolectin, TSH) and pelvic ultrasound, karyotyping was done as and when indicated. Inclusion criteria was adolescent girls (10-19 years) who visited the OPD of obstetrics and gynecology department of BSMMU for various gynecological problems and exclusion criteria were adolescent girls with pregnancy, women with diagnosed major psychosocial diseases, unwilling women. All data was analyzed using SPSS program of version 22. Results were expressed in frequencies or percentages. The results were presented in graphs, tables and descriptions.

RESULTS

In Table 1 shown that out of total 668 adolescents menstrual disorder was the commonest gynaecological problem, which were 418 (62.6%), followed by pervaginal discharge and vulval itching70 (10.48%), hirsutism 62 (9.28%), acne 45 (6.73%), lower abdominal pain 27 (4.04%), dysurea 21 (3.14%), feeling lump in lower abdomen 13 (1.95%), mastalgia 7 (1.05%), feeling lump in the breast 3 (0.45%) and discharge from breast 2 (0.29%) respectively (Figure 1).

Table 1: Adolescent's gynaecological complaints (n=668).

Gynaecological complaints	N	%
Menstrual disorder	418	62.6
Pervaginal discharge and vulval itching	70	10.48
Hirsutism	62	9.28
Acne	45	6.73
Lower abdominal pain	27	4.04
Dysurea	21	3.14
Feeling lump in lower abdomen	13	1.95
Mastalgia	7	1.04
Feeling lump in breast	3	0.45
Discharge from breast	2	0.29

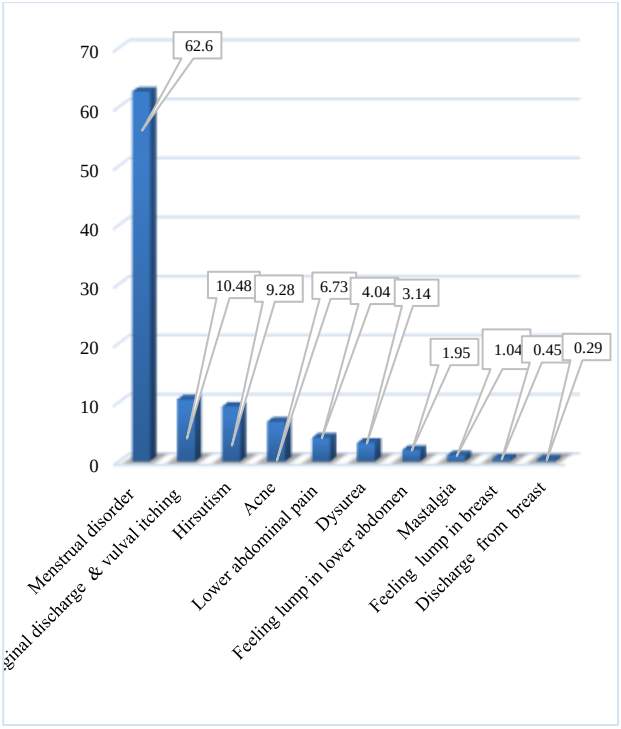

Figure 1: Adolescent's gynaecological complains.

In Table 2 shown that regarding adolescent's menstrual disorder, primary amenorrhea was found 15 (3.58%), secondary amenorrhea 76 (18.18%). In menstrual dysfunction menorrhagia 127 (30.38%), oligomenorrhoea 109 (26.07%), prolong period 53 (12.67%) and finally dysmenorrhea was found 38 (9.09%).

Table 2: Menstrual disorders (n=418).

Menstrual disorder		N	%
Primary amenorrhea		15	3.59
Secondary amenorrhea		76	18.19
Menstrual dysfunction	Menorrhagia	127	30.38
	Oligomenorrhoea	109	26.07
	Prolong period	53	12.68
Dysmenorrhea		38	9.09

In Table 3 shown that, in etiological of menstrual dysfunction (menorrhagia, oligomenorrhoea, prolong period) of 289 adolescents, abnormal uterine bleeding (AUB) was detected commonest 137 (47.40%) etiology, just followed by PCOD (polycystic ovarian disease) 128 (44.29%), thyroid disorder 13 (4.49%), moderate anaemia was 6 (2.07%) and finally psychological stress was 5 (1.73%) (Figure 2).

In Table 3 and 4 shown that, mullerian agenesis was the main cause 9 (60%) of primary amenorrhea (Figure 3) and PCOD was the main cause 59 (77.63%) of secondary amenorrhea (Table 5 and Figure 4).

Table 3: Etiology of menstrual dysfunction (menorrhagia, oligomenorrhoea, prolong period) (n=289).

Etiology of menstrual dysfunction	N	%
AUB	137	47.40
PCOD	128	44.29
Thyroid disorder	13	4.49
Moderate anemia	6	2.09
Psychological stress	5	1.73

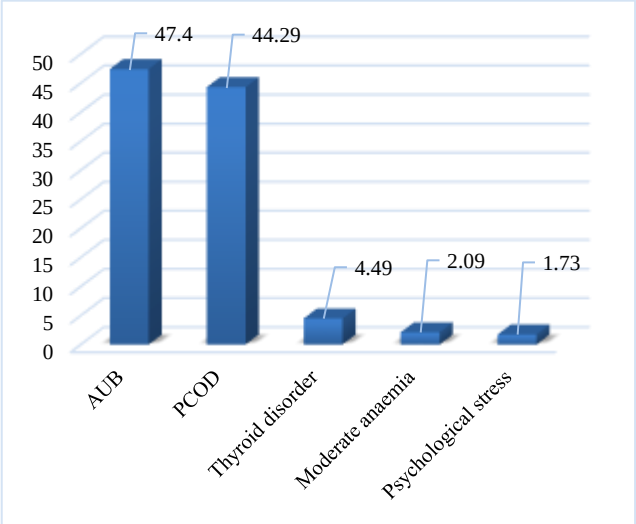

Figure 2: Etiology of menstrual dysfunction.

Table 4: Etiology of primary amenorrhea (n=15).

Etiology of primary amenorrhea	N	%
Mullerian agenesis	9	60.0
Hypogonadotrophic hypogonadism	1	6.66
Testicular feminizing syndrome	2	13.34
Imperforate hymen	3	20.0

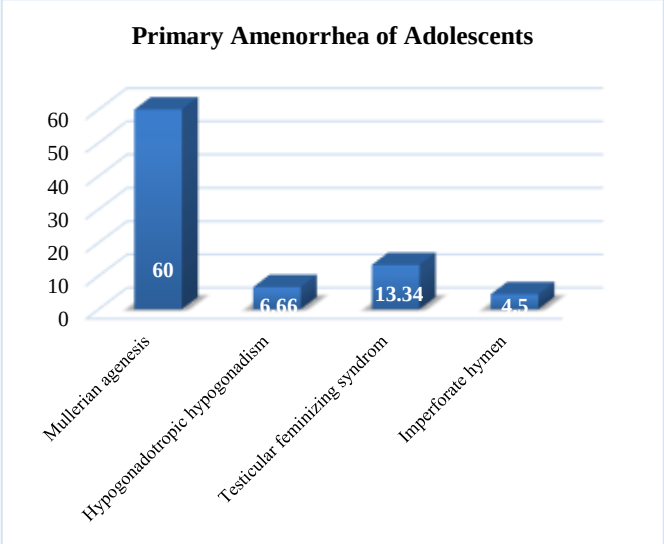

Figure 3: Primary amenorrhea of adolescents.

Table 5: Etiology of secondary amenorrhea (n=76).

Etiology of secondary amenorrhea	N	%
PCOD	59	77.63
Anemia	6	7.89
Psychological stress	5	6.57
Premature ovarian failure	3	3.95
Hyperprolactinemia	2	2.64
Tuberculosis	1	1.32

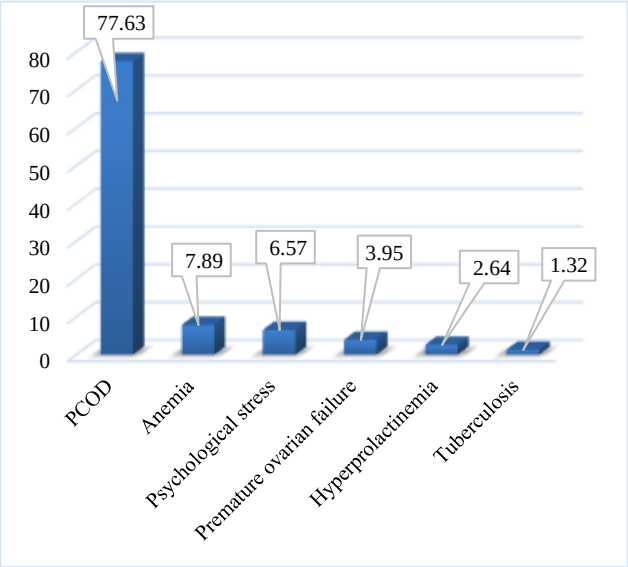

Figure 4: Secondary amenorrhea of adolescents.

DISCUSSION

The present study shows that menstrual disorders were the commonest gynecological problem 418 (62.6%) in adolescent girls in our country. These findings were similar with two others studies conducted by Goswamisebanti et al and Depaliprasad et al that menstrual disorders were commonest problem (58.06%), and (53.33%) respectively.[10,11] Amenorrhea, meno rrhagia, polymenorrhea, Oligomenorrhoea and dysmenorrhea are the common menstrual disorders reported in adolescent girls which can be effectively diagnosed and treated in the adolescent population.[12,13] In our study amenorrhea (both primary and secondary) were present in 91 (21.77%). Mullerian agenesis was found in 9 out 15 adolescents with primary amenorrhea.[1] cases of primary amenorrhea were ultimately diagnosed as hypogonadotrophic hypogonadism, 2 cases were of testicular feminizing syndrome and 3 cases were due to imperforate hymen those presented with cyclical lower abdominal pain and primary amenorrhea. In the study of Prasad et al mullerian agenesis was found 3 out of 8 girls with primary amenorrhea and one of these 3 had solitary kidney.[11] Another study reported after gondaldysgenesis, mullarian agenesis is the second most common cause of primary amenorrhea.[14] In our study most of the adolescents 44.29% (128 out of 289) were suffering from polycystic ovarian disease (PCOD) which was diagnosed by clinical criteria of menstrual problem such as secondary amenorrhea (duration 3-6 months) or oligomenorhea, feature of hyperandrogenism and hormonal assay and sonographic findings. But Chande Karki et al found 16 adolescents out of 87 (18.39%) were diagnoses to be cases of PCOD.[15] PCOD was the main etiology behind secondary amonorrhea 59 (77.63%). Other etiological factors were anemia, marked psychological stress, premature ovarian failure, hyperprolactinemia, and tuberculosis. A large study found that premature ovarian failure may be the cause of secondary amenorrhea in 10% case below the age of 40.[16] It is rare in adolescent but in our study 3 adolescents had secondary amenorrhea due to premature ovarian failure based on amenorrhea of more than 4 months S.FSH - 25 1u/l–45 1u/l and absence of follicles in the ovary in sonography. AUB (abnormal uterine bleeding) is not only restricted to adult population but it is more common in adolescents.[17] In as many as 95% abnormal bleeding is caused by AUB.[18] It may take 2-5 years to form complete maturation of hypothalamic pituitary ovarian axis.[19] In the present study out of 418 adolescents, suffering from menstrual problems, 137 were found to have AUB. Another study reported 32 out of 51 adolescents suffering from menstrual problems were diagnosed as cases of AUB. In our study, 13 cases there were lumps in the lower abdomen which were eventually diagnosed as a case of ovarian cyst and tumors. In present study dysmenorrhea were reported 38 (9.09%) of adolescent girls. Dysmenorrhea (31.25%) was one of the most frequently reported problems by in adolescent girl by Dipaliprasad et al Incidence of dysmenorrhea about 33.5% was reported by Nag 9 among adolescent girls in India.[11] Another study by George et al concluded that dysmonorrhea (87.8%) is a common problem of adolescent girls.[20] In present study oligomenorrhea was found in 109 (26.07%) of adolescent girls. Although 87.3% had normal cycles between 25 and 35 days and according to Nair et al 11.3% were oligo menorrhoiec, or cycle length greater than 35 days, comparatively lower than the 18-32.9% reported in other studies which included young adolescents.[13,21-23] Acne is a frequent skin problem for adolescents and is the important change taking place during adolescence.[24] In present study acne and hirsutism either alone or with PCOD were present in 45 (6.73%) and 62 (9.28%). In the present study adolescent girls presenting with lump in the breast (benign breast changes) was 3 (0.45%). Other studies also suggested that common presenting signs and symptoms in the adolescent patient are breast pain, nipple discharge, and the discovery of a mass.[25,26] The prevalence of moderate anemia in present study was also found in 2.07% cases.

CONCLUSION

Different types of menstrual disorders are the common problems of adolescent girls and so they need proper care of a priority basis. To diagnose the menstrual disorders accurately and to identify the causes are needed careful

and detailed history, thorough examination and a very good pathology lab support. For protection and promotion of the health of teenagers require proper awareness and greater attention. Present adolescent gynaecology remains an area which can perhaps best be done by setting up specialized adolescent gynaecological clinics. Setting up of separate adolescent clinics is desirable for proper management of adolescent gynaecological problems.

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