



A STUDY TO ASSESS THE HEALTH PROBLEMS AMONG ADOLESCENT GIRLS ATTENDING GYNAECOLOGY OUT PATIENT DEPARTMENT IN A TERTIARY CARE HOSPITAL IN MAHARASHTRA, INDIA

Obstetrics & Gynaecology

Nitin Bhimrao Bavdekar

Medical Officer, Department of Community Medicine, DPH, PGDHAM, PGDMLS MMHS, Maharashtra, India

Arun Sudhakar Sanap*

Junior Resident, Department of Obstetrics And Gynaecology, Sir JJ Hospital And Grant Medical College, Mumbai, Maharashtra, India. *Corresponding Author

Preeti Frank Lewis

Associate Professor, Department of Obstetrics And Gynaecology, Sir JJ Hospital And Grant Medical College, Mumbai, Maharashtra, India

ABSTRACT

BACKGROUND: Adolescence is a period of transition between childhood and adulthood. It is marked by enormous biological, physical and psychological, emotional changes. The young girls are embarrassed to discuss their gynaecological problems and are hesitant to seek medical help, however their problems need to be identified and addressed. This study is carried out to identify the health problems faced by adolescent girls.

METHODS: This research study was conducted at tertiary care hospital in Maharashtra, India from March 2019 to August 2020. A total of 470 adolescent girls in the age group of 10 to 19 years attending gynaecology out patient department at Sir J. J. hospital were included in this study.

RESULTS: Most of the girls who attended the OPD were between 17 to 19 years of age (50.2%). Maximum number (78.3%) of girls attain menarche between 11 to 13 years of age. 56.6% of girls presented with menstrual disorders and the most common menstrual disorder was found to be irregular menses (39.1%), followed by heavy menstrual bleeding (24.4%).

CONCLUSIONS: This study gives out that young girls must be educated about bodily changes, taught to take care of their during growing up years. Health education regarding menstrual hygiene, menstrual problems and reproductive health should be imparted to them. They must be encouraged to visit health facility in case of any problem.

KEYWORDS

INTRODUCTION:

The word 'Adolescence' is derived from the Latin term 'Adolescere' meaning to grow up.¹ World Health Organization (WHO) has defined 'Adolescence' as the period between 10 and 19 years.² Adolescent girls constitute one fifth of the female population in the world.³ Adolescent is "No more a child, not yet an adult".⁴ This is a time of transition from childhood to becoming responsible adults. Gynaecological problems in adolescent girls are unique and also has psychological bearing on their young minds. The young girls are embarrassed to discuss their gynaecological problems and are hesitant to seek medical help. Looking at the available morbidity and mortality statistics, this age group was considered as one of the healthiest periods & so, much neglected group till recent times.⁵ Against this background the present study was under taken to review the health problems of adolescent girls.

MATERIALS & METHODS:

Study design: A cross sectional study conducted on a total in gynaecology out patient department at Sir J. J. Hospital, Mumbai from March 2019 to August 2020.

Inclusion Criteria: All females in age group 10-19 years.

Exclusion Criteria: For simplicity of the study the patients with severe medical or psychiatric disorders, the medicolegal cases are excluded from the study.

A detailed history was taken. The general physical examination including height, weight, BMI, secondary sexual character and thyroid examination was carried out. The per abdomen and genital examination was conducted. The investigations such as complete blood cell counts, peripheral smear examination, blood grouping and Rh typing, coagulogram, renal function tests, liver function tests, blood sugar level, Urine routine microscopy, Urine culture sensitivity, Ultrasonographic examination of abdomen & pelvis. The other investigations like hormonal assay (LH, FSH, prolactin, TSH), contrast tomography, magnetic resonance imaging & karyotyping done wherever required.

Sample size: 470

Statistical analysis: Data will be analyzed using MS- Excel 2019.

OBSERVATIONS & RESULTS:

A total of 470 adolescent girls were included in the study. The

observations and results are as follows:

Age distribution: Most of the girls belong to 17 to 19 years of age i.e., 236 girls (50.2%) followed by 14 to 16 years i.e., 190 girls (40.4%). 44 of them belongs to 10 to 13 years

Marital status: Most of the girls are unmarried 417 (88.7%), while few of them 53 are married (11.3%).

Age of menarche: Majority of the girls attained menarche between the age of 11 to 13 years i.e. 368 (78.3%) followed by after 13 years of age i.e. 70. 4 girls attained menarche before the age of 11. 28 girls did not attain menarche.

BMI: 64 participants were excluded being antenatal. Out of remaining 406, 299 girls (73.6%) had normal BMI, 9.6% were underweight (<18) and other 11.8% & 5% were overweight (< 25-29) & obese (>30) respectively.

Health problems: Most of the girls had menstrual problems i.e. 266 (56.6%), white discharge 73 (15.5%) and teenage pregnancy 64 (13.6%)

Table 1: Health problems distribution among participants:

Health problem	Number	Percentage
Menstrual disorders	266	56.6
Teenage Pregnancy	64	13.6
White discharge	73	15.5
Ovarian pathologies	26	5.5
UTI	17	3.6
PID	8	1.7
Perineal itching	5	1.1
Fibroid uterus	5	1.1
Genital TB	4	0.9
Bartholin's abscess	2	0.4
Total	470	100

In menstrual disorder, most of them have irregular menses 104 (39.1%) followed by heavy menstrual bleeding 65 (24.4%) & dysmenorrhoea 36 (13.6%). Out of 104, 88 had DUB followed by PCOS 12 & hypothyroidism 4. In 65 cases of heavy menstrual bleeding, 58 were DUB followed by 2 each of PCOS and hypothyroidism. 2 patients were on anticoagulant treatment & 1 had

ITP. 24 patients had primary amenorrhoea.

Table 2: Distribution of study subjects according to their Menstrual health problems (n=236):

Menstrual problem	Number	Percentage
Irregular menses	104	39.1
Heavy menstrual bleeding	65	24.4
Primary ammenorrhoea	24	9
Secondary ammenorrhoea	19	7.1
Oligomenorrhoea	18	6.8
Dysmenorrhoea	36	13.6
Total	266	100

DISCUSSION:

In our study, the 10-19 years age group adolescent were included, majority (69.8%) of patients were from age group 17 to 19 years. The age group is mostly similar with study review from 2001 to 2015 by Punyatoj Bej et al.⁷ Joshi R et al.⁷ hospital-based study also revealed most of the girls belong to 17 to 19 years of age i.e. 54%.

In the present study, it was observed that 88.7% of adolescent girls were married and remaining were unmarried. All married girls were from late adolescent group (15-19 years) contributing to 15.2% in late adolescent group. The percentage of married adolescent girls in our study is comparable with NFHS-4 figures of 15.2% females of 15-19 years of age.⁸ In Joshi R et al.⁷ 23% were married whereas 77% were unmarried. In Prakriti Goswami study,⁹ 13.33% of adolescent girls were married. Adolescent marriages are still prevalent in our country leading to early sexual activity, hence more prone to STDs and reproductive tract infections, teenage pregnancy and its complications. In India, early marriage receives religious and social sanction. Despite the law, there are strong cultural pressures on parents to marry their daughters at an early age (<18 years). Early marriage leads to abuse of girl's human rights.

In our study, it is observed that the majority of girls (78.3%) were attained menarche at age of 11-13 years. The mean age at menarche in this study was 12.38 years. Sushrut samhita (500 B.C.) also noted that Indian girls commenced to menstruate at the age of 12 years.¹⁰ Joshi R et al.⁷ hospital-based study in Assam also noted Maximum number (75%) of girls attain menarche at the mean age of 12.6 years.

In our study, the majority (73.6%) of girls were having normal BMI. 9.6% found underweight. 11.8% were overweight & 5% were obese.

In Joshi R et al.⁷ hospital-based study 70.59% girls had normal BMI, 23.5% had low BMI, only 5.8% of the participants were overweight. In a study on 514 school going adolescents at Mumbai the prevalence of undernutrition was 8.8% and obesity was 2.3%.¹¹ & others were having normal BMI.

Problems Faced By Adolescents

It was observed that the commonly experienced adolescent health problem in the patients attending Gynaecology OPD were menstrual problems (56.6%), white discharge (15.5%) and teenage pregnancy (13.6%), ovarian pathology (5.5%), infections 7.7% (UTI, PID, Genital TB, Bartholin's abscess, perineal itch), fibroid uterus (1.1%).

Joshi R et al.⁷ study had similar observed health problems were Menstrual disorders 55.8%, Antenatal 16%, Vaginal discharge 6.6%, Ovarian tumour 4.9%, UTI 3.2%, Perineal abscess 1.7%. similarly, in Patil SS et al.¹² study Menstrual disorders 49.8%, Teenage pregnancy 40.2%, Vaginal discharge 5%, Mass per abdomen 0.13%, Trauma to genital tract 0.27%, Urinary tract infection 4.02%. According to study by Prakriti Goswami, the different gynaecological problems were menstrual disorders (60%), leucorrhoea (10.66%), infections (8%), ovarian cyst (5.33%), sexual assault (2.66%), teenage pregnancy (10.66%) and infertility (2.66%). A study by Goswami Sebanti et al.¹³ the different health problems were menstrual disorders (58%), leucorrhoea (19%), ovarian tumours (15%), sexual assault (2.4%), teenage pregnancy (4%).

In our study, Majority of girls with menstrual disorders suffered from Irregular menses (39.1%), heavy menstrual bleeding (24.4%), dysmenorrhoea (13.6%), primary amenorrhoea (9%), secondary amenorrhoea (7.1%), oligomenorrhoea (6.8%).

Patil SS et al.¹² In menstrual disorders, out of 362 cases of menstrual disorders, irregular cycles were seen in 197 i.e. 54.4 %. Prakriti

Goswami study,⁹ In menstrual disorders had Menorrhagia (55%), dysmenorrhoea (17.7%), primary amenorrhoea (6.66%), secondary amenorrhoea (17.7%), oligomenorrhoea (2.22%). A study by Goswami Sebanti et al.¹³ majority of girls with menstrual disorders suffered from hypo or oligomenorrhoea (40 %), primary & secondary amenorrhoea (29%), menorrhagia (24%), dysmenorrhoea (7%).

In our study, it is evident that the causes of irregular menses were DUB (84.6%), PCOS (11.5%), Hypothyroidism (4%).

Joshi R et al.⁷ noted, the causes of irregular cycle were DUB (44.4%), PCOD (29.7%), ITP (3.7%), Abdominal Koch's (7.4%), Ovarian malignancy (3.7%) & Hypothyroidism (11.1%).

In our study, it is evident that the causes of heavy menstrual in most of the patients was DUB (89.2%). 2 patients each had PCOS & hypothyroidism. 2 patients were on anticoagulant Treatment & 1 with ITP.

Archana D Rathod et al study¹⁴, the patients with puberty menorrhagia, 82.35% had anovulatory DUB, while 11.76 % had coagulation disorders, and 5.88% hypothyroidism. A study by Prakriti Goswami⁹, In menorrhagia, the underlying causes were DUB (96%), hypothyroidism (4%).

In our study, it is evident that the underlying cause of Secondary amenorrhoea were PCOS, Weight loss due to TB or chronic disease, Vaginal septum (Previously operated). The underlying cause in 24 cases of primary amenorrhoea were Mullerian agenesis, imperforate hymen, Hypothyroidism, turner's syndrome, Androgen insensitivity syndrome, Primary ovarian insufficiency. In most of the cases some disturbed anatomy was present.

CONCLUSIONS:

Adolescents present with a myriad of gynaecological problems. Menstrual disorders followed by teenage pregnancy & white discharge were the common gynaecological problems of adolescents. Early marriage of girls leads to early sexual activity and early childbearing exposing young women to sexual and reproductive health problems. Adolescent gynaecology is not a new subject. But it needs increasing awareness and further attention. Since the problems are specific to this group, setting up of separate adolescent clinics is desirable for efficient management. Health education should be given to adolescents in school & by community health workers to increase awareness of pubertal changes, STDs, contraception.

REFERENCES:

1. Bansal RD, Mehra M. Adolescent girls an emerging priority. Indian Journal of Public Health 1998; 22, (1): 1-2
2. Adolescence. The critical phase, the challenges and the potential published by W.H.O. Regional office for South-East Asia, New Delhi 1997.
3. United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects: The 2015 Revision, Key Findings and Advance Tables. Working Paper No. ESA/P/WP.241.
4. Brizio A, Gabbatore I, Tirassa M and Bosco FM (2015) "No more a child, not yet an adult": studying social cognition in adolescence. Front. Psychol. 6:1011. doi: 10.3389/fpsyg.2015.01011
5. World Health organization, Programming for Adolescent Health and Development, WHO Technical Report series 886. 1999; p10-11.
6. 7. Bej P. Adolescent health problems in India: A review from 2001 to 2015. Indian J Comm Health. 2015; 27, 4: 418-428.
7. Joshi R, Duomai VK. A study to assess the gynecological problems among adolescent girls attending gynecology out patient department in secondary care hospital in North East India. Int J Reprod Contracept Obstet Gynecol 2021; 10:546-9.
8. International Institute for Population Sciences (IIPS) and ICF. 2017. National Family Health Survey (NFHS-4), 2015-16: India. Mumbai: IIPS.
9. Journal of Evolution of Medical and Dental Sciences/ eISSN- 2278-4802, pISSN- 2278-4748/ Vol. 4/ Issue 102/ Dec. 21, 2015
10. Flint M. Menarche studies in India. Journal of Indian Medical Association 1976; 66(1): 20-23.
11. Agarwal M, Ghildiyal R, Khopkar S. Health status of school girls from affluent population of Mumbai. Indian Pediatr 1999; 36:75-78.
12. Patil SS, Mahanthshetty H, Supriya HM, Mahendra M. Gynecological problems of adolescent girls attending to rural tertiary care centre. Int J Reprod Contracept Obstet Gynecol 2019; 8:2627-30.
13. J Obstet Gynecol India Vol. 55, No. 4 : July/August 2005 Pg 353-355
14. Rathod AD, Chavan RP, Pajai SP, Bhagat V, Thool P. Gynecological Problems of Adolescent Girls Attending Outpatient Department at Tertiary Care Center with Evaluation of Cases of Puberty Menorrhagia Requiring Hospitalization. J Obstet Gynaecol India. 2016 Oct; 66(Suppl 1):400-6. doi: 10.1007/s13224-015-0770-1. Epub 2015 Oct 16. PMID: 27651637; PMCID: PMC5016410.