

PREVALENCE OF GYNAECOLOGICAL PROBLEMS AND ASSOCIATED LIFESTYLE HABITS AMONG ADOLESCENT GIRLS

Obstetrics & Gynaecology

**Mrs. Annie Priya
Albert M***

Lecturer, Little Flower College of Nursing *Corresponding Author

Mrs. Smitha J S

Asso.Professor, Sree Gokulam Nursing College

ABSTRACT

A cross sectional study was conducted to assess the prevalence of gynaecological problems and associated lifestyle habits among adolescent girls. **Objectives:** 1. To determine the prevalence of gynaecological problems among adolescent girls 2. To assess the lifestyle habits of adolescent girls 3. To find out the association between gynaecological problems and lifestyle habits. **Methodology:** In this study quantitative research approach and cross-sectional research design were used. The study was based on health belief model. Four schools from Trivandrum district were chosen for the present study. 440 subjects who satisfied inclusion criteria were selected. The tools used to collect data were socio personal proforma, gynaecological problem assessment questionnaire, PCOD risk assessment checklist, Standardized PMS screening tool and self-reported lifestyle habits assessing rating scale. Data were analyzed by using SPSS 20. **Results:** The findings revealed that severe menstrual pain was observed in 26.6% of adolescent girls. Nearly 46.4% of subjects had mild and 24.3% had severe risk of PCOD. One third of subjects (30.2%) had moderate to severe symptoms of PMS and 32.1% had Premenstrual dysphoric disorder. There was a highly significant association between dysmenorrhea, PCOD and PMS with lifestyle habits at 0.001 level of significance and there was significant association between excessive vaginal discharge with lifestyle habits at 0.01 level of significance. **Conclusion:** The results suggest that dietary habits and physical activities directly affect the reproductive health of adolescent girls. Hence its important to promote health awareness session on adolescent health and lifestyle habits for preventing the many present and future gynaecological problems.

KEYWORDS

gynaecological problems, adolescents, lifestyle habits.

INTRODUCTION

Adolescence is a transitional period of enormous physical and psychological changes [1]. The word adolescent is derived from Latin word "Adolesere" means to grow to maturity [2]. As per estimate of WHO nearly 1.2 billion adolescences in the world. In India about 21% of the population are in the age group of 10 – 19 years [3].

Adolescent problems are increasing over the years and need special consideration by the health care providers. Adolescence, transitional phase of growth and development between childhood and adulthood.

Adolescence in girls has been recognized as a special phase in their life which signifies the transition from girlhood to womanhood. It requires a specific approach and special attention. This period of transition makes them vulnerable to various issues in their life including general, reproductive, and psychological issues. This period in a girl's life is the preparation for safe motherhood. These adolescent girls are the direct reproducer for the future generation. So, the health of these girls not only influences her own health but, also the health of future generation [4].

Need For The Study

"No longer a child, not yet a woman", is a line which captures the ethos of adolescence beautifully.

Major physiological and psychological changes happens during adolescent period. Menstrual irregularities were commonly experienced by adolescent girls which may lead to gynaecological problems. The major abnormalities are dysmenorrhea, premenstrual syndrome (PMS), and menstrual irregularities. These disorders may lead to problems in daily activities such as academic excellence, achievements in sports, and loss of self-confidence. The lifestyle pattern of any individual leads to their prone of disease [5].

The main focus of the of this study was to identify the common gynaecological disorders and the factors in their new environment that predispose adolescent girls to gynaecological problems. The lifestyle habits may directly affect the reproductive health of adolescent girls. Hence the researcher selected this study to ensure healthy lifestyle patterns to prevent gynaecological problems thus contributing to a healthy community.

MATERIALS AND METHODS

Quantitative research approach and cross-sectional research design were adopted for the study. The data was collected from 440 subjects. The present study was conducted in four selected schools of

Trivandrum district two schools were selected from urban area and two schools from rural area conveniently. From each school investigator divides the girls into 5 strata based on the class of studying. and from each strata 22 samples each was selected by simple random sampling (lottery method). Self-reported technique was used for data collection. Socio personal proforma, gynaecological problem assessment questionnaire, PCOD risk assessment checklist, Standardized PMS screening tool and self-reported lifestyle habits assessing rating scale were the tools used for data collection. After the data collection from each school the investigator arranged an awareness session on gynaecological problems and its preventive measures for the whole girls. Data were analysed by using frequency, percentage and association between gynaecological problems with lifestyle habits using Chi square test.

RESULTS

Socio personal proforma revealed out of 440 subjects 36.6% of the subjects were in the age group of 15-16 years. More than one third of subjects (34.10%) were under weight, 14.80% of subjects were overweight, 49.5% of subjects had normal BMI and 1.6% of subjects were obese. 4.3% of subjects had family history of gynaecological cancer such as breast cancer, ovarian cancer and uterine cancer.

Majority of subjects (59.8%) attained menarche between 12-13 years. Mean age of menarche among adolescent girls was 12 years. Majority of subjects (72.3%) had menstrual cycle between 21-34 days, 74.8% had 4 to 7 days cycle, 80.7% were using disposable sanitary pads and 10.2% were absent from school every cycle in last 6 months. The common problems experienced by the subjects during menstruation were lower abdominal pain (85.4%), backpain (67.9%), anger (78%), fatigue (73.1%) and irritability (69.1%).

More than a quarter of subjects (26.6%) had severe pain and nearly half of subjects (48.9%) had moderate pain during menstruation. Out of 117 subjects with severe menstrual pain, majority of subjects (81.2%) experienced severe pain during every cycle in last 6 months and most of the subjects (86.4%) experienced pain from onset of menarche. 15.9% of subjects were using drugs such as T. Paracetamol, T. Meftal and other analgesics for pain relief. 16.1% of subjects were using any alternative treatment modalities such as hot application, ayurvedic and homeopathic treatment. More than half of the subjects (51.8%) had excessive vaginal discharge, 5.9% had excessive vaginal discharge more than 20 days in a month, 10.7% had offensive smell, 54.1% had clear vaginal discharge, 4.8% were using pad for excessive vaginal discharge, 28.9% had itching over perineal area and 6.8% had rashes over perineal area.

Nearly a quarter of subjects(24.3%) had severe risk and above quarter of subjects(29.3%) had moderate risk and 46.4% of subjects had mild risk of PCOD. Out of 440 subjects 37.7% of subjects had mild symptoms, 30.2% had moderate to severe symptoms of PMS and 32.1% of subjects had Premenstrual

Dysphoric Disorder

Nearly a quarter of subjects (23.4%) were following unhealthy lifestyle habits. Out of 440 subjects 29.3% were following unhealthy physical activities and 26.4% were practising unhealthy diet pattern. There was a highly significant association between dysmenorrhea, PCOD and PMS with lifestyle habits at 0.001 level of significance and there was significant association between excessive vaginal discharge with lifestyle habits at 0.01 level of significance.

ANALYSIS

5.1 Frequency & Percentage Distribution Of Subjects According To The Level Of Pain Experienced During Menstruation. (n =440)

Level of pain	Frequency(f)	Percentage(%)
No pain	24	5.4
Mild pain	84	19.1
Moderate Pain	215	48.9
Severe pain	117	26.6
Total	440	100

Table 5.1 shows that more than a quarter of subjects (26.6%) had severe pain and nearly half of subjects (48.9%) had moderate pain during menstruation

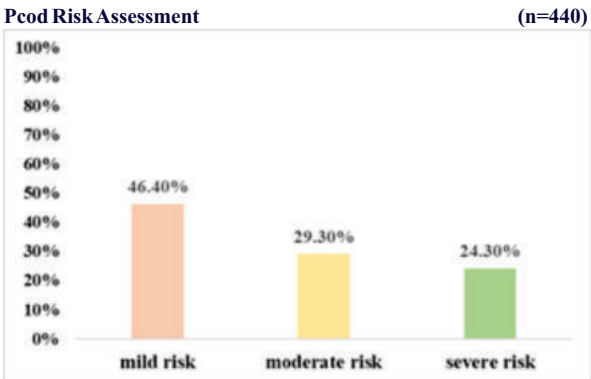


Figure 5.2: Percentage Distribution Of Subjects According To The Pcod Risk Assessment

Figure 5.2 shows that nearly a quarter of subjects(24.3%) had severe risk and above quarter of subjects(29.3%) had moderate risk and 46.4% of subjects had mild risk of PCOD.

5.3 Percentage Distribution Of Subjects According To Pms Screening (n =440)

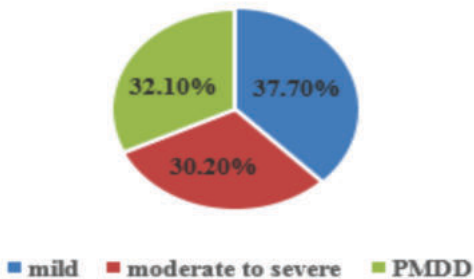


Figure 5.3: Percentage Distribution Of Subjects According To The Pms Screening

Figure 5.3 shows that 37.7% of subjects had mild symptoms, 30.2% of subjects had moderate to severe symptoms and 32.1% of subjects had Premenstrual dysphoric disorder.

5.4a Association of gynaecological problems and lifestyle habits

Table 5.4a: Association Between Gynaecological Problems And Lifestyle Habits (n=440)

Variables		Lifestyle habits	Chi-square	df	p value
		Unhealthy	Moderate	Healthy	
Dysmenorrhea					
None	03	18	03		
Mild	12	62	10		
Moderate	36	159	20	41.06	6 0.001***
Severe	52	60	05		
Risk of PCOD					
Mild	4	171	29		
Moderate	11	109	09	279.9	4 0.001***
Severe	88	19	00		
PMS					
Mild	05	138	23		
Moderate	18	103	12	136.34	4 0.001***
to severe					
PMDD	80	58	03		

*** Significant at 0.001 level

Table 5.4a shows that there was highly significant association between dysmenorrhea, PCOD and PMS with lifestyle habits at 0.001 level of significance.

5.4 B: Association Between Gynaecological Problems And Lifestyle Habits (n =228)

Variables		Lifestyle habits	Chi-square	df	p value
		Unhealthy	Moderate	Healthy	
Excessive Vaginal Discharge					
Less than 5 days	12	45	07		
Less than 10 days	23	60	03		
Less than 20 days	21	2	02	18.22	6 0.01**
More than 20 days	14	12	00		

Table 5.4.b shows that there was a significant association between excessive vaginal discharge & lifestyle habits at 0.01 level of significance.

DISCUSSION

The study found that more than a quarter of subjects (26.6%) had severe pain and nearly half of subjects (48.8%) had moderate pain during menstruation. Out of 117 subjects, majority of subjects (81.2%)

experienced pain during every cycle in last 6 months and 86.4% experienced pain from onset of menarche. These findings were similar to a cross sectional study on menstrual characteristics and prevalence of dysmenorrhea in 310 college going girls from Madhya Pradesh which reported that 34.2% of girls experienced severe pain, 36.6% moderate and 29.2% had mild pain[6]

The findings showed that nearly a quarter of subjects(24.3%) had severe risk and above a quarter of subjects(29.3%) had moderate risk and 46.4% of subjects had mild risk of PCOD. These findings were not consistent to the findings of a study on the proportion and determinants of polycystic ovarian syndrome among 480 health sciences students in South India which revealed that 8.1% were already diagnosed with PCOS, 9.1% were at high risk and 90.9% were at low risk for PCOS[7]. The findings showed that 37.7% of subjects had mild symptoms, 30.2% of subjects had moderate to severe symptoms of PMS and 32.1% of subjects had PMDD. These findings were not congruent with the findings of a cross sectional study on the prevalence of premenstrual dysphoric disorder among 397 school going adolescent girls from Chandigarh which revealed that prevalence of PMDD was found to be 4.8%. Majority of the respondents reported moderate levels (62%)[8].

The study revealed that there was highly significant association between dysmenorrhea, PCOD, PMS and lifestyle habits at 0.001 level of significance and there was significant association between excessive vaginal discharge & lifestyle habits at 0.01 level of significance. These findings were compared with the findings of a study on the Pathogenesis of polycystic ovary syndrome from Kadapa which showed that there was a significant association between dietary intervention ($p < 0.0113$) and physical activity scores ($p < 0.029$) among the PCOD patients[9]. These findings were par with the findings of a cross sectional study on premenstrual syndrome and associated dietary and lifestyle behavior among 300 university students from UAE which showed that high calorie/fat/sugar/salt foods intake was associated ($p < 0.05$) with increased risk of reporting premenstrual symptoms. However, fruit consumption was associated with a decreased risk of reporting[10].

Nursing Implications

The present study has got implications in nursing practice, education, research and administration.

- School health nurse can educate and counsel the school girls regarding the influence of lifestyle habits on gynaecological problems and its preventive measures.
- Public health nurse can educate adolescent girls, their parents and teachers about gynaecological problems and associated lifestyle habits.
- Structured teaching and instructional materials can be used for educating gynaecological problem.
- The study will be a valuable reference material for further research.
- Nurse administrator can organize conference, workshop seminar and awareness programmes on gynaecological problems and lifestyle modifications for adolescent girls

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