



# A STUDY TO ASSESS THE EARLY DETECTION OF GYNECOLOGICAL PROBLEM AMONG ADOLESCENT GIRLS AT SMVPTC, PUDUCHERRY

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## ABSTRACT:

**Introduction:** Adolescence is a critical phase in a young woman's life, marked by profound physical, emotional, and psychological changes. Adolescence, typically defined as the period between the ages of 10 to 19, is characterized by the onset of puberty. **Objectives of the study:** The main objective of the study to assess the early detection of gynaecological problems among adolescent girls. **Methodology:** The research approach used for this study was quantitative research approach. A descriptive research design was adopted for this present study. By using convenient sampling technique, 50 adolescent girls in selected college were selected for the present study. **Results:** The present study reveals that in pre-interventional level majority 41 (82%) of them had dysmenorrhea problems, 27 (54%) of them had amenorrhea, 11 (22%) of them had oligomenorrhea, 15 (30%) of them had menorrhagia, 14 (28%) had urinary tract infection, 4 (8%) had abnormal uterine bleeding, 8 (16%) had mastalgia, 39 (78%) had premenstrual syndrome, 5 (10%) had hypomenorrhea, 8 (16%) had metrorrhagia and 7 (14%) had polymenorrhagia. **Conclusion:** The study findings concluded that there is no significance association between Age, gender, educational status, income, Marital status, residential area, age of attaining puberty, types of family and have you aware about gynaecological problem the early detection of gynaecological problems among adolescent girls.

**Keywords:** Adolescence, Gynaecological problems, Early detection

## INTRODUCTION:

Adolescence is a critical phase in a young woman's life, marked by profound physical, emotional, and psychological changes. During this transitional period, adolescent girls experience a of gynaecological challenges that can significantly impact their health and overall well-being. Understanding and addressing these issues is essential to ensure the holistic development and quality of life of these young individuals.

Adolescence, typically defined as the period between the ages of 10 to 19, is characterized by the onset of puberty. For girls, this marks the development of secondary sexual characteristics such as breast development, menstruation, and the growth of pubic hair. These physical changes are a phase to the body's preparation for potential motherhood. However, this transformation is not always smooth, as it brings with it a host of gynaecological challenges that adolescents need to navigate.

Nearly one-fourth (27.7%) of the Indian female population falls in the 15 to 29 years age group. This reproductively important transition phase of life associated with growth spurts in several physical and mental dimensions. It is estimated in epidemiological surveys that as many as 80% of reproductive age women experience some symptoms in the premenstrual phase.

Menstrual Disorders are one of the most prevalent gynaecological issues among adolescent girls. These include irregular periods, heavy bleeding (menorrhagia), and painful periods (dysmenorrhea). Menstrual irregularities can disrupt daily life, affect academic performance, and lead to emotional distress.

Polycystic Ovary Syndrome is a hormonal disorder that affects many adolescent girls, often leading to irregular menstrual cycles, acne, excessive hair growth, and weight gain. Left untreated, PCOS can have long-term health implications, including fertility issues and an increased risk of chronic conditions like diabetes.

Pelvic Inflammatory Disease is an infection of the female reproductive organs and can result from sexually transmitted infections (STIs). Adolescents engaging in sexual activity are at risk for PID which if left untreated can cause infertility and chronic pelvic pain.

Although endometriosis is more commonly diagnosed in adult women, it can also affect adolescents. This painful condition occurs when tissue similar to the uterine lining grows outside the uterus, causing pain, infertility, and a reduced quality of life.

Urinary tract infections (UTIs) are common and can affect individuals of all ages, including adolescent girls. A UTI occurs when bacteria enter and infect any part of the urinary system, including the bladder, urethra, or kidneys. In adolescent girls, UTIs are more prevalent than in males, primarily due to their shorter urethra, which allows easier access for bacteria. UTIs are most frequently caused by *Escherichia coli* (E. coli) bacteria, which can enter the urethra and travel up to the bladder. Sexual activity, inadequate hygiene, and urinary retention can increase the risk of UTIs in adolescent girls.

In adolescent girls, normal vaginal discharge is usually clear or white and may vary in texture from thin and watery to thicker and mucus-like. The amount of discharge can also vary, but it is generally clear or white in color. Normal vaginal discharge serves several purposes, including keeping the vaginal area moist, cleaning the vagina, and preventing infection. In some cases, white vaginal discharge may indicate an infection, such as a yeast infection or bacterial vaginosis. Symptoms of an infection may include itching, redness, a foul odor, and an increase in the amount of discharge. If an adolescent girl experiences any of these symptoms along with white discharge, it is essential to consult a healthcare provider for diagnosis and treatment.

Mastalgia, commonly known as breast pain or breast tenderness, can affect adolescent girls during their development and menstrual cycle. It is a common concern and can be a source of anxiety for both adolescents and their parents.

Adolescents may present with Pelvic masses like Functional ovarian cyst, Obstructing vaginal / uterine anomalies. Ovarian tumor Tubercular mass, Pelvic kidney. In adolescents, most commonly are functional or benign neoplastic ovarian masses, Mature cystic teratoma is the most frequent neoplastic tumor of children and adolescents. The primary diagnostic technique for evaluating pelvic masses in adolescents is ultrasonography (or) if the results of the ultrasonography examination are inconclusive, CT or MRI. Obstructive genital anomalies like imperforate hymen to transverse vaginal septa vaginal agenesis present with primary amenorrhea 6 and pelvic mass. PCOD, obesity, endocrinopathies are increasing in incidence in adolescent age group due change in life style patterns, sedentary life, faulty eating habits.

Adolescent girls facing gynaecological problems require special attention and care. Early intervention and education are paramount. Healthcare providers, parents, and educators must collaborate to ensure that adolescents are well-informed about their bodies and the gynaecological changes they may experience. Open communication about menstrual health, safe sexual practices, and access to healthcare resources is vital to empower girls to make informed decisions regarding their well-being.

Furthermore, it is essential to overcome the stigma surrounding gynaecological issues and promote a culture of empathy and support. Adolescents should feel comfortable discussing their concerns with healthcare professionals, as early detection and treatment can prevent long-term complications and promote overall health and well-being.

## **NEED FOR THE STUDY**

### **Worldwide**

Dysmenorrhea is a common problem that affects 50–90% of women in their reproductive years worldwide. It's the most commonly reported gynaecological complaint among women. The global prevalence of premenstrual syndrome (PMS) is 47.8%. This means that 75% of women of reproductive age experience some PMS symptoms. 3–8% of women report extremely severe PMS.

According to the National Health Nutrition Examination Survey (2014), Urinary tract infection is 13,320 per 1,00,000 adolescents per year and it has also been estimated that at least one-third of all school students in India are diagnosed with urinary tract infection by the time they reach 10-19 age. Silent urinary tract infections may occur among girls due to inadequate intake of water and infrequent passage of urine.

According to the study by Hasna H. Pervin et al. (2020) in Bangladesh, it is concluded that out of the 668 adolescent girls, 418 (62.6%) had different types of menstrual disorders. Of these 418 cases, about 127 (30.38%) were a case of puberty menorrhagia, 109 (26.07%) were oligomenorrhoea and 91 (21.77%) were amenorrhoea.

In Nigeria, the overall prevalence rate of abnormal vaginal discharge was 55.6% and among those pregnant, it was 73.3%. Majority of the women had whitish vaginal discharge (76.3%) and 49.6% had experienced foul and fish-smelling discharges. *Candida albicans* was the pathogen most isolated (63.3%) followed by *Gardnerella vaginalis* (13.9%). Majority of the women (76.2%) also had coexisting gynecological complaints, of which 41.3% and 38.8% experienced itching around the vulva and lower abdominal pain, respectively.

In Turkey, the study revealed that 87.6% of the participants had a gynaecological problem. The most widespread gynecological problems were dysmenorrhoea (63.2%), premenstrual syndrome (PMS) (56.7%), urinary tract infection (22.4%) respectively.

## India

The prevalence of mastalgia in India appears to be similar, with a reported prevalence of 51–54% in the adult urban population. In Rajasthan, the study stated that the prevalence of PMS was 21.33%. Moderate to severe PMS was 14% and PMDD was 7.33% according to DSM-IV-TR criteria. Fatigue/lack of energy, decreased interest in work were the most commonly reported symptoms. Decreased school/work efficiency and productivity was the commonest form of functional impairment. In Madhya Pradesh, a study of adolescent girls found a 9.1% incidence of UTI. Another study found that 12.7% of girls had UTI. A study of nursing students found that 20% of the study population had UTI. In Karnataka, a study of 748 young females from four nursing colleges in Karnataka, India found a prevalence of 47.33%.

## Tamil Nadu

In Tamil Nadu, a study of college students found that the prevalence of moderate to severe PMS was 14.3% and PMDD was 3.7%. A study of 489 college students in Gujarat found that the prevalence of PMS was 18.4% and PMDD was 3.7%.

## Puducherry

A study done by Karthik Balajee (2019) states that the prevalence of dysmenorrhoea was 45% and that of menorrhagia was 17%. Devipriya Suresh et al. (2022) stated that 25.1% of women had probable PCOS, 18.7%

had irregular menstrual history, 8.4% had Hirsutism, and 2% had both symptoms. However, there are few studies on the early detection of gynaecological problems among adolescent girls. Early detection and treatment can prevent long-term complications and promote overall health and well-being. This study assesses the early detection of gynaecological problems among adolescent girls in a selected hospital, Puducherry.

## **STATEMENT OF THE PROBLEM**

“A STUDY TO ASSESS THE EARLY DETECTION OF GYNECOLOGICAL PROBLEM AMONG ADOLESCENT GIRLS AT SMVPTC, PUDUCHERRY”

## **OBJECTIVES OF THE STUDY**

- To assess the early detection of gynecological problems among adolescent girls
- To associate early detection of gynecological problems with their selected demographic variables

## **RESEARCH METHODOLOGY:**

Research approach is the basic procedure for conducting the study. (Polit & Hunger). A quantitative research approach was adopted for the present study.

## **RESEARCH DESIGN:**

Research design refers to a researcher's overall plan for obtaining answers to the researcher questions or for testing the research hypothesis (Polit & Hunger ). A descriptive research design was adopted for the present study.

## **SETTING OF THE STUDY:**

The study was conducted at Sri Manakula Vinayagar Polytechnic College, Puducherry

## **POPULATION:**

The study population comprised of adolescent girls in Sri Manakula Vinayagar Polytechnic College, Puducherry

## **SAMPLE:**

The study samples comprised of adolescent girls in selected college, who meet the inclusion criteria

## **SAMPLE SIZE:**

The sample size consists of 50 adolescent girls in selected college.

**SAMPLE TECHNIQUE:**

A convenient sampling technique was used for the present study.

**SAMPLE SELECTION CRITERIA:**

Inclusion criteria:

Adolescents girls who

- had attained menarche.
- were willing to participate in the study.
- were in the age group of 10 to 19 years

Exclusion criteria:

Adolescents who

- were under before 10 years and after 19 years
- under treatment for disorders related to other systems

**MAJOR FINDING**

Regarding the age in years, the majority 18 (36%) were in the age group above 18 years, 15 (30%) were in the age group of 15-16 years. In the aspect of gender, 50 (100%) were female. With regards to religion, majority 46 (92%) were Hindu, 2 (4%) were Muslim and 2 (4%) were Christian. In the aspect of education status, the data shows majority 10 (20%) were Diploma in ECE and 40 (80%) were Diploma in CSE. Regarding income per month, the data shows that the majority 19 (38%) had income of Rs.10000-20000 and 15(30%) had Rs. 20000- to Rs.30000. With regards to marital status, 18 (36%) were unmarried, 2 (4%) were married and 30 (60%) were single. With regards to area of residence, 23 (46%) were in rural area and 27 (54%) were in urban area. In the aspect of age of attaining puberty majority, 36 (72%) attained in 10-15 years and 14 (28%) attained in 15-20 years. Regarding type of family 35 (70%) were in nuclear family and 15 (30%) were in joint family.

**RESULTS AND DISCUSSION**

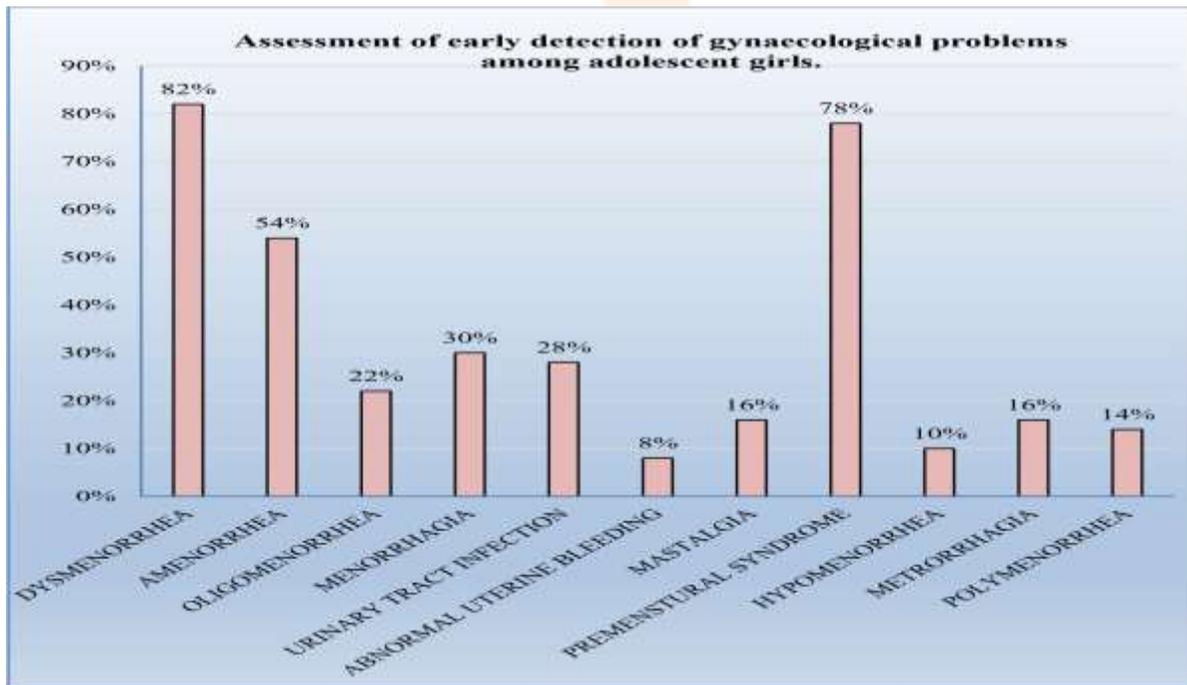
**Table 1: Assessment of early detection of gynecological problems among adolescent girls.**

**N = 50**

S.NO	GYNECOLOGICAL PROBLEMS	FREQUENCY (n)	PERCENTAGE %
1.	DYSMENORRHEA	41	82%
2.	AMENORRHEA	27	54%

3.	OLIGOMENORRHEA	11	22%
4.	MENORRHAGIA	15	30%
5.	URINARY TRACT INFECTION	14	28%
6.	ABNORMAL UTERINE BLEEDING	4	8%
7.	MASTALGIA	8	16%
8.	PREMENSTRUAL SYNDROME	39	78%
9.	HYPOMENORRHEA	5	10%
10.	METRRORRHAGIA	8	16%
11.	POLYMENORRHEA	7	14%

**Table 1:** The above table reveals the frequency and percentage-wise distribution of early detection of gynecological problems among adolescent girls. The finding shows that, majority 41 (82%) of them had dysmenorrhea problems, 27 (54%) of them had amenorrhea, 11 (22%) of them had oligomenorrhea, 15 (30%) of them had menorrhagia, 14 (28%) had urinary tract infection, 4 (8%) had abnormal uterine bleeding, 8 (16%) had mastalgia, 39 (78%) had premenstrual syndrome, 5 (10%) had hypomenorrhea, 8 (16%) had metrorrhagia and 7 (14%) had polymenorrhea.



**Figure 1:** Percentage wise distribution of level of knowledge regarding eye care among patients with gynaecological problem.

**Table 2: Association of the early detection of gynecological problems among adolescent girls with their selected demographic variables**

S.No	Demographic variables	Frequency (n)	X <sup>2</sup> value
<b>1</b>	<b>Age in years</b>		X <sup>2</sup> = 3.892 p = 0.421 (NS)
	a) 15-16 years	15	
	b) 16-17 years	7	
	c) 17-18 years	10	
	d) 18 and above	18	
<b>2.</b>	<b>Gender</b>		X <sup>2</sup> = 8.903 p = 0.179 (NS)
	a) Male	0	
	b) Female	50	
	c) Transgender	0	
	d) Others	0	
<b>3.</b>	<b>Religion</b>		X <sup>2</sup> = 2.250 p = 0.895 (NS)
	a) Hindu	46	
	b) Muslim	2	
	c) Christian	2	
	d) Others	0	
<b>4.</b>	<b>Educational status:</b>		X <sup>2</sup> = 4.856 p = 0.302 (NS)
	a) Diploma in EEE	0	
	b) Diploma in Civil	0	
	c) Diploma in ECE	10	
	d) Diploma in CSE	40	

<b>5.</b>	<b>Income per month</b>		$X^2 = 7.663$ $p = 0.264$ (NS)
	a) 5000-10,000	13	
	b) 10,000-20,000	19	
	c) 20,000-30,000	15	
	d) 50,000 and above	3	
<b>6.</b>	<b>Marital status:</b>		
	a) Married	2	$X^2 = 2.375$ $p = 0.416$ (NS)
	b) Unmarried	18	
	c) Widow	0	
	d) Single	30	
<b>7.</b>	<b>Residential area:</b>		
	a) Urban	27	$X^2 = 2.116$ $p = 0.474$ (NS)
	b) Rural	23	
<b>8.</b>	<b>Age of attaining puberty</b>		
	a)10-15years	36	$X^2 = 2.711$ $p = 0.956$ (NS)
	b)15-20years	14	
	c)20 and above	0	
<b>9.</b>	<b>Type of family</b>		
	a) Nuclear family	35	$X^2 = 0.024$ $p = 1.301$ (NS)
	b) Joint family	15	
<b>10.</b>	<b>Have you aware about gynecological problem</b>		
	a) Yes		$X^2 = 3.884$ $p = 0.143$ (NS)
	b) No		

\* $p < 0.05$  - Significant;  $p < 0.01$  - Highly Significant

**Table 2:** The above table shows that there is no significance association between Age, gender, educational status, income, Marital status, residential area, age of attaining puberty, types of family and have you aware about gynecological problem the early detection of gynecological problems among adolescent girls.

## CONCLUSION:

The present study assessed assess the early detection of gynecological problem among adolescent girls at SMVPTC Puducherry. The study findings concluded that there is no significance association between Age, gender, educational status, income, Marital status, residential area, age of attaining puberty, types of family and have you aware about gynecological problem the early detection of gynecological problems among adolescent girls.

## RECOMMENDATIONS:

- Same study can be conducted with large samples.
- Same study can be conducted in hospital settings.

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