



# Knowledge of adolescent girls regarding PCOS residing in urban community

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## Abstract

Adolescent girls are more susceptible to the endocrine condition polycystic ovarian syndrome. Studies have shown that it affects 5% to 10% of women during their reproductive years. **Aim:** The study was aimed to assess the knowledge adolescent girls polycystic ovarian syndrome(PCOS). **Study approach:** Descriptive survey approach was used. Convenience sampling was adopted to select 100 adolescent girls. **Tool and technique:** Structured knowledge questionnaire was used to collect data. **Results:** Majority 61% of adolescent girls had poor knowledge regarding Poly Cystic Ovarian Syndrome(PCOS). **Conclusion:** Study concluded that there is vital requirement in creating awareness among adolescent girls regarding PCOS.

**Key words:** Knowledge, PCOS, Adolescent girls.

## Introduction

Young people between the ages of 12 and 19 are commonly seen as being in good health<sup>1</sup>. Adolescents must pay closer attention because this is a time of rapid physical development as well as sexual, physiological, and psychological changes. Adolescent years are a formative time for habits and behaviour that last a lifetime<sup>2</sup>. Many major disorders that affect adults today had their origins in youth. For instance, smoking, STDs like HIV, poor food and exercise habits, and tobacco use all contribute to sickness or early death in later life<sup>1</sup>. Numerous elements, both beneficial and detrimental, have an impact on teenagers' health and wellbeing. While some elements are societal in character, others can be determined naturally<sup>3</sup>.

For an adolescent female, developing a regular menstrual cycle is a crucial phase. Differentiating between typical individual variation and actual endocrine or biological issues is difficult<sup>4</sup>.

Teenage girls struggle with a variety of menstrual issues, but PCOD is the one that is currently becoming more common. When PCOS was first identified, it was categorised as a condition characterised by irregular menstrual cycles, infertility, obesity, and an excess of testosterone. Since then, research has revealed that elevated insulin levels in the blood are typical of PCOS and help to cause an excess of testosterone. Additional research has established that polycystic ovarian syndrome patients are more likely to experience metabolic disturbances such type II diabetes and abnormalities in blood lipids<sup>4</sup>.

Gynaecologists and endocrinologists have struggled to pinpoint the pathophysiology behind the development of polycystic ovaries for a very long time. The primary pathophysiology may still be insulin resistance and hormone imbalance, though. Due to increased insulin resistance, PCOS is linked to higher metabolic and cardiovascular risk factors<sup>5</sup>. Obesity, poor glucose tolerance, type 2 diabetes, and the metabolic syndrome are all linked to PCOS in more than 40% of instances, according to research<sup>5</sup>. In the past few years, PCOS cases have increased by roughly 30% in India. Lack of awareness and lifestyle modifications are thought to be the main causes of rapid rise in incidence and consequences<sup>6</sup>.

For early treatment and to avoid significant problems, adolescent girls must be aware of signs and symptoms of PCOS and its complications. When young girls' levels of knowledge and perception are compared, it is possible to use this information to create better educational materials for the general public about PCOS.

The researcher wants to evaluate teenage girls' knowledge of PCOD identification and prevention in order to facilitate early detection and treatment since PCOD is becoming more prevalent.

**Problem statement:** Knowledge adolescent girls regarding Polycystic Ovarian Syndrome (PCOS)

### Objectives

1. To assess the knowledge of adolescent girls regarding Polycystic Ovarian Syndrome (PCOS)
2. To find the association between knowledge of adolescent girls regarding Polycystic Ovarian Syndrome (PCOS) and their selected personal variables

### Hypothesis:

**H<sub>1</sub>:** There will be significant association between association between knowledge of adolescent girls regarding Polycystic Ovarian Syndrome (PCOS) and their selected personal variables

### Materials and methods

Descriptive survey approach was used to conduct the study. Formal permission for conducting the study was obtained from the administrative authority of the community. 100 Samples were selected using convenience sampling technique. Structured knowledge questionnaire was used to collect the data related to demographic characteristics of the adolescent girls and the knowledge regarding PCOS. Tools were validated by the subjects expert and using split half method reliability of the tool was established. Pilot study was conducted to assess the feasibility of the study. An informed consent was obtained from each sample indicating their willingness to participate in this study. The data was analysed using descriptive and inferential statistic

### Results:

**TABLE 1:****Findings related to personal variables of adolescent girls**

n=100

Sl no	Sample characteristics	Frequency	Percentage (%)
1	<b>Age</b>		
	13-14	13	13
	15-16	34	34
	17-19	53	54
2	<b>Religion</b>		
	Hindu	49	49
	Muslim	40	40
	Christian	05	05
	Others	06	06
3	<b>Dietary habits</b>		
	Vegetarian	18	18
	Mixed	82	82
4	<b>Previous knowledge on PCOS</b>		
	Yes	41	41
	No	59	59

Total 100 adolescent girls enrolled for the study and majority 53% of them were in the age group of 17-19 years and 49% study participants were Hindus. Among the participants 82% were consuming mixed diet and majority 50% had no previous knowledge regarding PCOS.

**2. Findings related to knowledge of adolescent girls regarding PCOS****TABLE 2****Frequency and percentage distribution of knowledge of adolescent girls regarding PCOS**

n=100

LEVEL OF KNOWLEDGE	FREQUENCY	PERCENTAGE
Good knowledge	00	00
Average knowledge	39	39
Poor knowledge	61	61

Data presented in table 2 shows that majority 61% of the adolescent girls had poor knowledge and 39% of the participants had average knowledge and none of the adolescent girls had good knowledge regarding PCOS.

Similar findings were reported in a study conducted to assess the knowledge of adolescent girls regarding PCOS at Mohali and reported that only 61.5% had fair knowledge regarding PCOS<sup>7</sup>. Other study finding reported that 60% adolescent had average knowledge and 38% had poor knowledge regarding PCOS<sup>8</sup>.

**TABLE: 3**

**Mean, median, standard deviation and range of knowledge scores**

	Mean	Median	Standard deviation
<b>Knowledge score</b>	8.19	10	1.92

Data presented in table 3 reveals that the mean knowledge score was 8.19, and the median was 10 and standard deviation was  $\pm 1.92$ .

**3. Findings related to association between the knowledge of adolescent girls regarding PCOS and their selected personal variables**

There was no statistically significant association found between the knowledge of adolescent girls regarding PCOS and their selected personal variables ( $p > 0.05$ ). Hence it was inferred that the knowledge of adolescent girls regarding Poly Cystic Ovarian Syndrome was not influenced by their personal variables.

**Conclusion:**

This study presents the knowledge of adolescent girls regarding PCOS. The findings revealed that adolescent girls had poor knowledge regarding PCOS and indicated that there is a need to provide awareness regarding PCOS among these students. Equipping the adolescent girls with risk factor and prevention of PCOS will motivate them to practice healthy life style which in turn will reduce the prevalence of PCOS.

**Limitations:**

The study included adolescent girls in urban community. Similar study with educational intervention could be planned for adolescent girls residing in rural and urban community and also in educational institutions.

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Nil

**Conflicts of interest:**

There are no conflicts of interest.

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