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## Knowledge about polycystic ovarian syndrome among women

**Katari Kantha and Arumugam Indira**

**Abstract**

**Background:** Polycystic ovarian syndrome is an endocrine disorder which affects the females. It has been found through studies that it affects around 5% to 10% of women in their reproductive years. The study was conducted to assess the knowledge on the polycystic ovarian syndrome among women.

**Objective:** The objective was to assess the Knowledge Regarding PCOS (Polycystic Ovarian Syndrome) among women.

**Methods:** The participants in this cross-sectional study came from Komerika a rural area of Nellore. A total of 84 women were randomly selected. Trained investigators administered a standard questionnaire to each participant during a face-to-face interview.

**Results:** The results show that, out of 84 women with regard to the knowledge Regarding PCOS (Polycystic Ovarian Syndrome) among women 20(23.8%) are having A grade knowledge, 40(47.6%) are having B grade knowledge, 20(23.8%) are having C grade knowledge, 4(4.8%) are having D grade knowledge. The study concluded that Source of information, consumption of junk food, dietary patterns of the students were associated with their level of knowledge on PCOS at 5% level of significance.

**Keywords:** Endocrine disorder, PCOS, women, Nellore

**Introduction**

Polycystic ovary syndrome (PCOS) is a heterogeneous, multifactorial, complex genetic and endocrine disorder, characterized by menstrual disturbances, clinical and biochemical manifestations of hyperandrogenism<sup>[1]</sup> and polycystic ovaries.

The detrimental and widespread effects of PCOS on the physiology and metabolism of the body have led to its recognition as a metabolic syndrome with detectable abnormalities, such as insulin resistance, hyperinsulinemia, hirsutism, obesity, dyslipidemia and hypertension that culminate in serious long-term consequences, such as increased risk of development of type II diabetes mellitus<sup>[2]</sup>, endometrial hyperplasia and coronary artery disease<sup>[3]</sup>.

PCOS affects 6 - 10% of women of reproductive age based on the National Institute of Health criteria and as high as 15% when the broader Rotterdam criteria are applied<sup>[4]</sup>, menstrual disorders and biochemical and clinical hyper androgenism being reported in 60.6% of PCOS women<sup>[5]</sup>. The prevalence of PCOS in Nellore district is 15.4%<sup>[6]</sup>.

Familial aggregation of this syndrome is well established and there are ethnic and racial variations in the prevalence of the syndrome and its symptoms<sup>7</sup>. Initially recognized as an endocrine disorder of premenopausal women, the definition of PCOS has now been expanded from a disorder that presents at menarche and ends at menopause to a disorder that may be present from birth to senescence<sup>[8]</sup>. Many other studies conducted in Nellore related to the health status of the women<sup>[9-15]</sup>.

The etiology of the syndrome remains obscure, and the variability in phenotype expression continues to render the clinical care and research concerning this heterogeneous condition challenging.

The aim of the current study is to assess the Knowledge Regarding PCOS (Polycystic Ovarian Syndrome) among women.

**Detailed Research Plan**

This epidemiological study with a cross-sectional design was carried out in the komerika village of Nellore district. The target population of this study consisted of all women who meets the inclusion criteria like who are between 20-60 years, who are available during the data collection time and who are not associated with any comorbid diseases.

The target population of this study consisted of 115 adults. Sample size was calculated to estimate the prevalence of different health outcomes investigated in the survey, considering a confidence level of 95%, prevalence for the unknown outcomes of 50%, sampling error of 3 percentage points, percentage of losses estimated at 10%. Based on these parameters, we obtained a sample size of 84 women. For association tests, considering an estimated prevalence of the outcome of 50%, 80% power and 95% confidence level, this sample size would allow detecting as statistically significant a prevalence ratio of up to 1.4 as a risk factor.

**Tools for Data Collection**

**Section A:** It deals with demographic data including age, education, type of the family, occupation, monthly income, nature of the work, sleeping hours, exercise type & duration, food pattern, habits, consumption of fast food, stress, BMI.

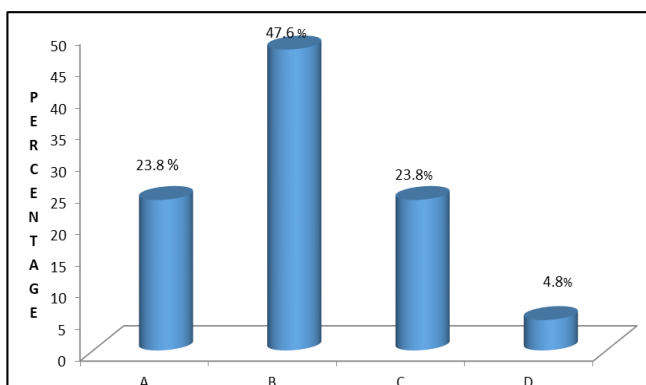
**Section B:** Structured questionnaire on knowledge of PCOS.

**Data Collection Procedure:** This cross-sectional study was a conducted in Komerika a rural area of Nellore district during 2016. This study comprises of women between 20-60 years. Institutional ethics committee approved the study protocol. Written informed consent was obtained from participant. Socio demographic data was obtained from women and structured questionnaire on knowledge of PCOS was obtained. Descriptive and inferential statistics were applied.

**Results and Discussion:** A total of 84 women aged 20-60 years participated in the study.

**Table 1:** frequency and percentage distribution of knowledge on PCOS among women n=84

Sl. No	Level Of Knowledge	Pretest	
		Frequency	Percentage
1	A	20	23.8
2	B	40	47.6
3	C	20	23.8
4	D	4	4.8
Total		84	100



**Fig 1:** The percentage distribution of knowledge on PCOS among women

The results show that, out of 84 women with regard to the knowledge Regarding PCOS (Polycystic Ovarian Syndrome) among women 20 (23.8%) are having A grade knowledge, 40 (47.6%) are having B grade knowledge, 20

(23.8%) are having C grade knowledge, 4(4.8%) are having D grade knowledge.

**Discussion**

The current study showed that most of the respondents were not aware of PCOS and its sign and symptoms before educational intervention. A similar results were obtained in study that most of the women in and around Nellore had inadequate knowledge in pre-test regarding various other related health conditons [16-20]. The study concluded that Source of information, consumption of junk food, dietary patterns of the students were associated with their level of knowledge on PCOS at 5% level of significance.

The present study results are consistent with the findings of the previous studies conducted in Nellore region [20-28].

**Conclusion**

The finding of study revealed that majority of the women had grade B, C and D knowledge. So different education programs should be done to provide knowledge about such diseases to women. Furthermore, study indicates that majority of women don't consult gynecologist unless there is severe or life threatening problem or disease. So women should consult gynecologist at least once in a year for their better health status.

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