



**International Journal of Biology, Pharmacy
and Allied Sciences (IJBPAS)**

'A Bridge Between Laboratory and Reader'

www.jibpas.com

**KNOWLEDGE AND ATTITUDE REGARDING POLYCYSTIC OVARIAN
SYNDROME AMONG COLLEGE STUDENTS IN SELECTED COLLEGES AT
GUDALUR WITH A VIEW TO DEVELOP A SELF-INSTRUCTIONAL
MODULE**

ANU P^{1*} AND HEMAVATHI V²

- 1:** Research Scholar, Department of pediatric Nursing, Bharath institute of higher education and research, Chennai, Tamil Nadu, India
- 2:** Principal, Department of Psychiatric Nursing, Sree Balaji College of Nursing, Chennai, Tamil Nadu, India

***Corresponding Author: Ms. Anu parveen: E Mail: licprakash.ds@gmail.com**

Received 15th Oct. 2024; Revised 5th Dec. 2024; Accepted 6th Feb. 2025; Available online 1st Feb. 2026

<https://doi.org/10.31032/IJBPAS/2026/15.2.9448>

ABSTRACT

A frequent hormonal problem among women who are of reproductive age is polycystic ovarian syndrome (PCOS). Excess amounts of male hormones or irregular or protracted menstrual cycles are common in women with PCOS. Their infertility results from these hormone imbalances, which also cause them to miss menstruation. The goal of the study is to evaluate the knowledge and attitude of adolescent females on PCOS at Government arts and science College in Gudalur.. The study used a non-experimental descriptive survey design for its research design. One hundred teenage females from Government Arts and Science College in Gudalur participated in the study. The findings indicate that, when it comes to PCOS, 88.33 percent of teenage girls lack adequate knowledge, only 11.70 percent have somewhat acceptable knowledge, and 75 percent of samples have a neutral attitude, 25 percent have a negative attitude, and none have a good attitude. Knowledge and attitude have a somewhat positive link, according to the correlation. The aforementioned research indicates that teenage females have a negative attitude and insufficient

information about PCOS, which is why it's critical to create a self-instructional PCOS module for educational programmes.

Keywords: Polycystic Ovarian Syndrome (PCOS), Male Hormones, Irregular Or Protracted Menstrual Cycles

INTRODUCTION

Polycystic ovarian syndrome is a common endocrine condition affecting women of reproductive age [1–3]. It is characterized by hirsutism, menstrual irregularities, obesity, acne, and alopecia [4]. The prevalence of PCOS varies from 5% to 20%, according to the literature [4-6]. PCOS affects women's fertility and increases their risk of depression and diabetes mellitus [7-8]. The evidence that is currently available also shows that women who are not well-informed about PCOS may have unfavorable outcomes [9]. Typically, PCOS is diagnosed through hormonal profiling and pelvic ultrasonography [10].

A number of factors, including irregular menstrual cycles, the absence of periods, high testosterone levels or symptoms such as hirsutism, and ovarian cysts, are used to diagnose PCOS [11]. The National Health Service (NHS) states that altering one's lifestyle and losing weight can help control the illness [12]. According to reports, PCOS symptoms might significantly improve with as little as 5% weight loss. Additionally, a regular menstrual cycle can be encouraged by using contraceptives like progesterone tablets

or combination contraceptive pills. In addition, fertility problems are also treated with drugs like clomiphene and the off-label use of metformin and letrozole in women who want to get pregnant [12].

It has been noted that greater knowledge of the condition improved the management of PCOS's detrimental effects. According to Colwell and colleagues, after participating in a clinical research trial, women with PCOS felt more knowledgeable about the condition and were inspired to adopt preventive measures [9]. A Saudi Arabian study demonstrated how participants' knowledge increased as a result of taking part in a social media awareness campaign [13]. There is a paucity of literature on Pakistani women's perceptions of PCOS, risk assessment, and disease awareness. According to a few research, the majority of Pakistani women are more likely to develop PCOS and lack sufficient knowledge about the disease [14].

Anjali C done a study in uttarakhand, India and she found that PCOS occurs about 8-11% of reproductive age group women. Recently changing lifestyles and rising obesity

worldwide have contributed to rise in the incidence of PCOS.

A greater grasp of PCOS in women could greatly enhance one's comprehension of the disorder. This might create opportunities for early therapy that would have a higher chance of success [8]. This offers a great chance to assess undergraduate students' attitudes, knowledge, and views of PCOS. This could lead to a deeper comprehension of the fundamental factors causing the disease's high frequency in this demographic. Therefore, the study's objective was to appraise undergraduate students' understanding, attitudes, and perceptions on the factors that contribute to polycystic ovarian syndrome (PCOS).

METHODOLOGY:

This study used an experimental descriptive survey design, with 300 teenage girls recruited from Government Arts and Science College in Gudalur using a non-probabilistic purposive sample technique. A structured knowledge questionnaire was used to collect data on polycystic ovarian syndrome, consisting of 25 multiple-choice questions, with a score of 1 for correct answers and 0 for incorrect answers. The knowledge questionnaire had a maximum score of 25, a minimum score of 0, and three categories for knowledge grading: less than 50% belongs to less adequate,

moderately adequate (50–69%), and adequate (70–100%). The Likert scale was used to measure attitude. Based on the Likert five-point rating system, the scores were generated. There is one negative comment and twenty-four positive attitudes spread among 25 items. Every statement has a rating of five agree, four neutral, three disagree, two strongly disagree, and one extremely disagree. In this, neutral, disagree, and strongly disagree are seen as bad attitudes, whereas strongly agree and agree are considered positive attitudes.

The principal of the Government Arts and Science College in Gudalur granted formal approval. 100% of the samples that met the sampling criteria were chosen prior to the data collection from the adolescents where oral consent was gained using a non-probability technique. After the data was sorted and compiled, frequency analysis was used to examine demographic factors such income, community region, mother's educational status, age, religion, and education. The polycystic ovarian syndrome knowledge and attitude were evaluated using the mean and standard deviation. To find a relationship between knowledge and attitude and the selected demographic parameters, the Chi square test was used. The Karl Pearson correlation coefficient technique is employed

to identify a relationship between the attitudes and knowledge of teenage females regarding polycystic ovarian syndrome.

RESULTS:

Based on the goals and hypotheses, the data were examined using both descriptive and inferential statistics. Sixty-six percent of the samples in this investigation are older than 16 years. 34.3% of the population is 17 years of age or older. Hindus make up 56.6% of the samples, Christians make up 27.3%, and Muslims make up 16%. All samples consist of one plus one student. In 3.4% of samples, parents have never attended school, in 31% of samples, parents have completed high school, in 38.4% of samples, parents have a college degree, and in 28.4% of samples, parents have completed their education. A family's income falls into three categories in the samples: 18.4% have less than 10000, 31.6 percent have between 10000 and 20000, and 50% have 20000 or more in income. A nuclear family makes up 81.7 percent of the samples, joint families comprise 13.4 percent, and extended families comprise 6%. A nuclear

family makes up 81.7 percent of the samples, joint families comprise 13.4 percent, and extended families comprise 4%. Of the samples, 26.5 percent reside in a rural area and 73.4 percent live in an urban one. 1.5% of samples contain prior health information, 4% come from friends and teachers, 4% come from the media, and 88.4% of samples contain no information at all about polycystic ovarian syndrome.

Figure 1 shows the teenage females' level of awareness of polycystic ovarian syndrome. 88.33% of samples in this group have less adequate Only 11.70 percent of people have moderately adequate understanding of polycystic ovarian syndrome, and nobody knows enough about it. There is 11 mean and 2.15 standard deviation.

Adolescent girls' attitude towards polycystic ovarian syndrome In this study, 25% of the samples have a negative opinion towards polycystic ovarian syndrome, whereas 75% of the samples have a neutral view and 65 is mean 7 is the standard deviation (**Figure 2**).

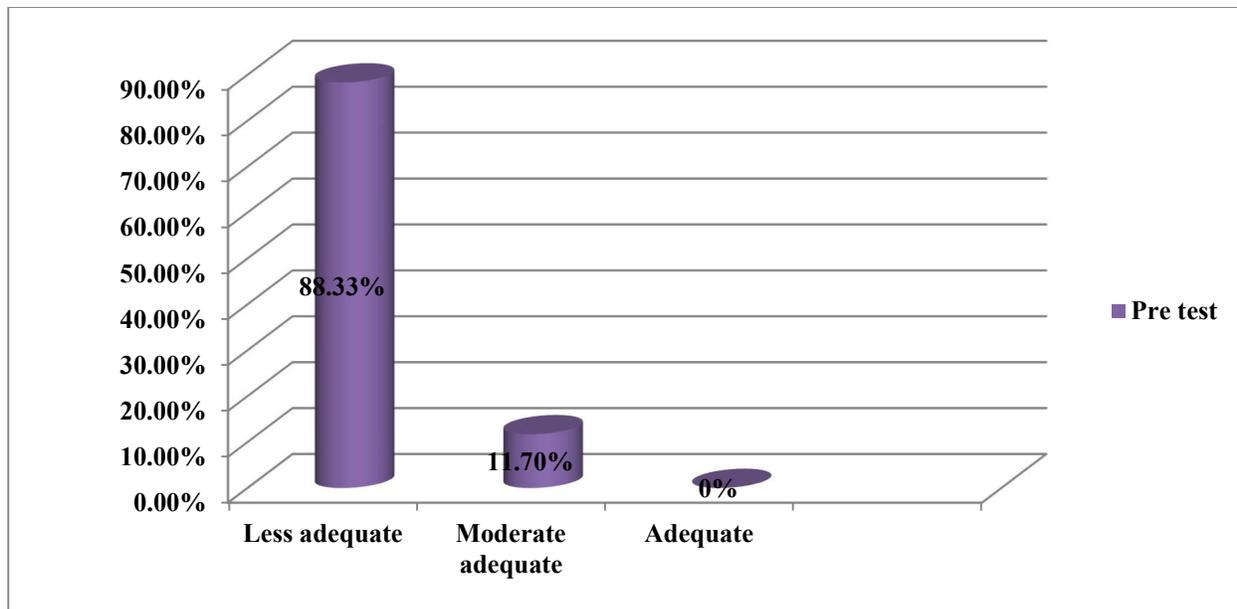


Figure 1: Level of knowledge

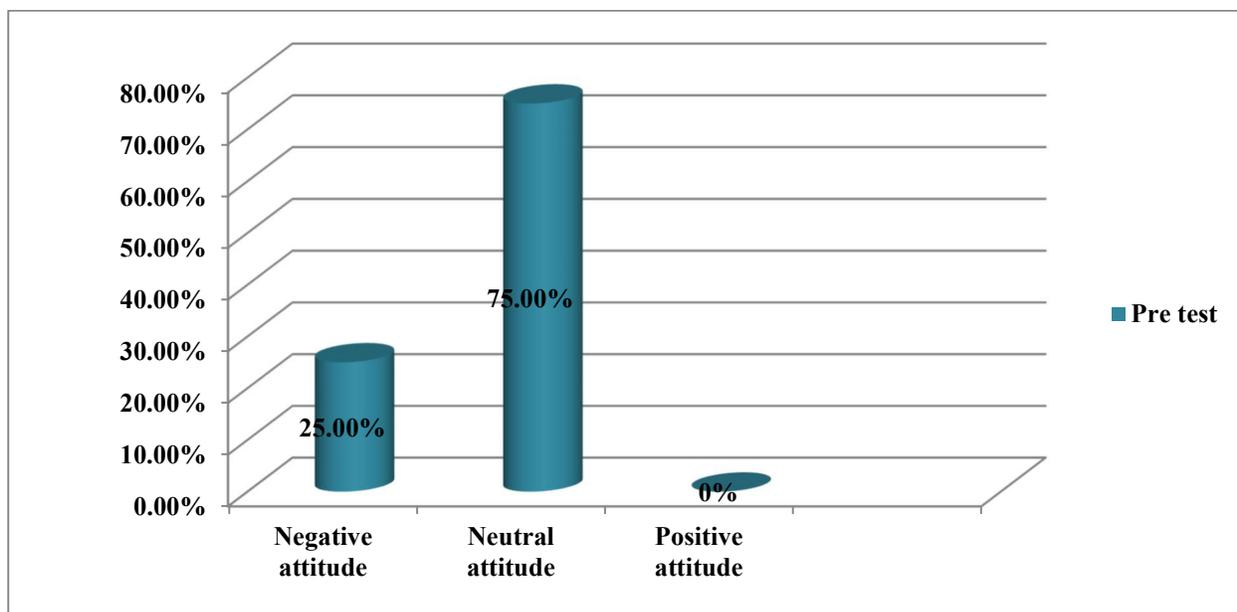


Figure 2: Level of Attitude

In demographic variables including age, religion, parents' educational status, community region, family type, income, and prior knowledge, the square value is less than the p-value. The null hypothesis is accepted

because this indicates that there is no significant correlation between the knowledge and attitude of teenage girls about polycystic ovarian syndrome and their demographic characteristics, including age, religion,

parental educational status, community area and family type, income, and prior knowledge.

DISCUSSION:

The goal of the current study was to evaluate teenage girls' attitudes and level of knowledge about polycystic ovarian syndrome. At a chosen Government Arts and Science College, 300 teenage girls between the ages of 15 and 17 provided the data.

The study's primary goal was to evaluate teenage girls' attitudes and level of knowledge about polycystic ovarian syndrome. According to the current study, only 11.70% of respondents had moderately awareness about PCOS, and 86.33% have less than acceptable knowledge of the condition [4, 15]. Regarding polycystic ovarian syndrome, 75% of samples have a neutral view and 25% have a negative attitude. The primary goal of the study was to assess the attitudes and knowledge of teenage girls in a particular Government Arts and Science College regarding PCOS in order to create a self-instructional module. For this investigation, a descriptive, non-experimental research study design was adopted. The purpose of this study was to evaluate the knowledge and attitudes of teenage girls regarding PCOS, as well as to ascertain the correlation between the two [2, 16]. Additionally, the study aimed to ascertain

the association between the knowledge and attitudes of teenage girls regarding PCOS and their selected demographic variables.

CONCLUSION:

Understanding among teenage girls is crucial for preventing PCOS. According to the results of the current survey, 88.33% of participants do not know enough about polycystic ovarian syndrome. and only 11.70% of them possess somewhat adequate expertise. Regarding polycystic ovarian syndrome, about 0% have a favourable attitude, 75% have a neutral attitude, and 25% have a negative attitude. There is no correlation between attitude and knowledge of PCOS. A somewhat positive link was discovered between teenage girls' knowledge and attitudes about PCOS.

REFERENCES:

- [1] McGowan MP. Polycystic ovary syndrome: a common endocrine disorder and risk factor for vascular disease. *Curr Treat Options Cardiovasc Med.* 2011; 13(4):289–301.
- [2] Piltonen TT, Ruokojärvi M, Karro H, Kujanpää L, Morin-Papunen L, Tapanainen JS, *et al.* Awareness of polycystic ovary syndrome among obstetrician-gynecologists and endocrinologists in Northern Europe. *PLoS One.* 2019; 14(12):e0226074.

- [3] Attlee A, Nusralla A, Eqbal R, Said H, Hashim M, Obaid RS. Polycystic ovary syndrome in university students: occurrence and associated factors. *Int J Fertil Steril*. 2014; 8(3):261–266.
- [4] Sidra S, Tariq MH, Farrukh MJ, Mohsin M. Evaluation of clinical manifestations, health risks, and quality of life among women with polycystic ovary syndrome. *PLoS One*. 2019; 14(10):e0223329.
- [5] Ding T, Hardiman PJ, Petersen I, Wang FF, Qu F, Baio G. The prevalence of polycystic ovary syndrome in reproductive-aged women of different ethnicity: a systematic review and meta-analysis. *Oncotarget*. 2017; 8(56):96351–96358.
- [6] Bozdag G, Mumusoglu S, Zengin D, Karabulut E, Yildiz BO. The prevalence and phenotypic features of polycystic ovary syndrome: a systematic review and meta-analysis. *Hum Reprod*. 2016; 31(12):2841–2855.
- [7] Hollinrake E, Abreu A, Maifeld M, Van Voorhis BJ, Dokras A. Increased risk of depressive disorders in women with polycystic ovary syndrome. *Fertil Steril*. 2007; 87(6):1369–76.
- [8] Hillman SC, Dale J. Polycystic ovarian syndrome: an under-recognised problem?. *Br J Gen Pract*. 2018; 68(670):244. doi: 10.3399/bjgp18X696101
- [9] Colwell K, Lujan ME, Lawson KL, Pierson RA, Chizen DR. Women’s perceptions of polycystic ovary syndrome following participation in a clinical research study: implications for knowledge, feelings, and daily health practices. *J Obstet Gynaecol Can*. 2010; 32(5):453–459.
- [10] Timpatanapong P, Rojanasakul A. Hormonal profiles and prevalence of polycystic ovary syndrome in women with acne. *J Dermatol*. 1997; 24(4):223–9.
- [11] National Institute of Child Health and Human Disease (NIH/NICHD). How do health care providers diagnose PCOS? 2017. Available from:
- [12] NHS. Polycystic ovary syndrome. Treatment. 2019.
- [13] Alotaibi M, Shaman AA. Enhancing polycystic ovarian syndrome awareness using private social network. *Mhealth*. 2020; 6:33.
- [14] Rizvi M, Abbas A, Tanwir S, Sabah A, Ali ZM, Sundrani MM, *et al.*

Perception and attitude of patients regarding polycystic ovarian syndrome (PCOS) in tertiary care hospitals of Pakistan-a survey based study. *International Journal of Pharmacy & Therapeutics*. 2014; 5(3), 147–152.

[15] Ferriman D, Gallwey JD. Clinical assessment of body hair growth in women. *J Clin Endocrinol Metab*. 1961; 21:1440–1447.

[16] Pedersen SD, Brar S, Faris P, Corenblum B. Polycystic ovary syndrome: validated questionnaire for use in diagnosis. *Can Fam Physician*. 2007;53(6):1042–1041.