International Journal of Innovative Research in Health Science
Published: July 2026
Volume 2, Issue 7, Pages 1 - 4

Research Article
DOI: doi.org/10.63349/ijirhs.202633

A study to assess the knowledge regarding polycystic ovarian disease among pharmacy students in sir Issac Newton College of pharmacy.

[1] E. Jayanthi , [2] Anusiya. M, [3] Dharshini. M, [4] Kodeswari. M, [5] Manimozhi. R, [6] Paramadharshini. N, [7] Preethi. B, [8] Subasree. G

[1] Department of Department of OBG nursing, Sir Issac Newton college of nursing, Tamil Nadu, India.

[2] Sir Issac Newton college of nursing, Tamil Nadu, India

Author Designation: [1] Assistant Professor, [2] M.Sc. (Nursing)

***Corresponding author: E . Jayanthi**

Abstract:

Background: Polycystic Ovarian Disease (PCOD) is a endocrine disorders among women of reproductive age. Early awareness, knowledge is very important for early diagnosis, prevention and proper management of its long-term complications. **Methods:** A quantitative descriptive research design was used. The study was carried out in the female Pharmacy students of the age group 19-21years in Sir Isaac Newton College of Pharmacy with a population of 60 students. The sampling technique employed was convenience sampling. A pre-designed and validated structured self-administered questionnaire comprising of a demographic details and 15 multiple choice questions which assessed knowledge about PCOD was used to collect the data. The gathered data underwent analysis. **Results:** The results demonstrated that adequate knowledge was observed among the majority of the participants, whereas the rest had moderate knowledge, and none of the students exhibited inadequate knowledge regarding Polycystic Ovarian Disease. Statistically significant relationships were found between knowledge level and family income ($p = 0.040$), age growth to puberty ($p = 0.009$) and the source of information. **Conclusion:** It is concluded that the knowledge about PCOD among the students of Pharmacy was satisfactory.

Key words: PCOD, awareness, knowledge.

INTRODUCTION

Polycystic Ovarian Disease (PCOD) is a endocrine illnesses impacting teenage females and women of childbearing age. It is linked to hormonal dysregulation, erratic menstruation patterns, hyperandrogenism, obesity, insulin insensitivity, infertility, and metabolic anomalies. If not identified and treated promptly, PCOD might lead to enduring problems .

The incidence of PCOD has significantly risen in recent years, with research indicating that 20–25% of Indian women of childbearing age are impacted. Teenagers are more susceptible owing to alterations in lifestyle, poor nutritional choices, insufficient physical exercise, and a deficit of knowledge.

Early detection and suitable lifestyle changes can markedly diminish difficulties associated with the condition, so enhancing awareness of PCOD is crucial. Evaluating their knowledge base can assist in pinpointing current deficiencies and underscore the necessity for focused instructional strategies.

The results of the research will furnish required data for formulating efficient educational approaches aimed at enhancing awareness, early detection, advocating healthy lifestyle choices, and mitigating the long-term repercussions linked to PCOD. The study main aim was to assess the knowledge regarding PCOD among pharmacy students.

METHODOLOGY

A quantitative, descriptive research design was employed. The participants were 60 female pharmacy students aged 19–21 years from Sir Isaac Newton College of Pharmacy, Pappakovil, Nagapattinam, selected through a convenience sampling technique based on the eligibility criteria.

Information was gathered using a validated, structured self-administered questionnaire. Institutional permission and informed consent were obtained before data collection. Participants were provided 30 minutes to complete the questionnaire.

The gathered data underwent analysis including frequency, percentage, mean, and standard deviation, while the Chi-square test was applied to examine the relationship between knowledge levels and selected demographic characteristics.

RESULT

Table 1 summarizes the demographic profile of the participants. Most students were 18–19 years old (50.0%), female (98.3%), and from rural areas (80.0%). The majority were Hindus (81.7%), had their father as the head of the family (85.0%). Nearly half (46.7%) belonged to nuclear families, while 53.3% had more than four family members. More than half (56.7%) attained puberty between 12–13 years, and television (76.7%) was the primary source of information regarding PCOD.

Table 2 illustrates that majority of the participants had adequate knowledge, followed by moderate knowledge, while none of the students had inadequate knowledge.

Table 3 shows a significant association was observed with family income age at attainment of puberty, and source of information. No significant association with other variables ($p > 0.05$).

DISCUSSION

The present study assessed the knowledge regarding PCOD among pharmacy students. The results indicated that most of the participants had adequate knowledge, while a few had moderate knowledge, and none had inadequate knowledge. This may be due to their healthcare education and exposure to information through academic sources and media.

The study also found a significant association between knowledge level and family income, age at attainment of puberty, and source of information ($p < 0.05$). However, age, gender, place of living, religion, head of the family, type of family, and number of family members showed no significant association with knowledge ($p > 0.05$).

Overall, the findings indicate that pharmacy students possess satisfactory knowledge regarding PCOD. However, regular awareness and educational programmes are recommended to strengthen their understanding of the disease, promote early detection, and encourage healthy lifestyle practices.

CONCLUSION

The study concluded that the majority of pharmacy students had adequate knowledge regarding Polycystic Ovarian Disease (PCOD). Knowledge was significantly associated with family income, age at attainment of puberty, and source of information, whereas other demographic variables showed no significant association. The findings emphasize the importance of continuous health education and awareness programmes to enhance knowledge, promote early identification, and encourage preventive measures for PCOD among young women.

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Table 1: Distribution of demographic variables among pharmacy students. (N = 60)

S. No.	Demographic Variable	Category	Frequency (n)	Percentage (%)
1	Age (Years)	18–19 years	30	50.0
		19–20 years	12	20.0
		20–21 years	18	30.0
2	Gender	Male	1	1.7
		Female	59	98.3
3	Place of Living	Rural	48	80.0
		Urban	12	20.0
4	Religion	Hindu	49	81.7
		Christian	5	8.3
		Muslim	6	10.0
5	Head of the Family	Father	51	85.0
		Mother	8	13.3
		Siblings	1	1.7
6	Family Income (₹/Month)	₹5,000–10,000	11	18.3
		₹10,000–15,000	28	46.7
		₹15,000–20,000	21	35.0
7	Type of Family	Single family	20	33.3
		Nuclear family	28	46.7
		Joint family	12	20.0
8	Number of Family Mem-	Three	4	6.7
		Four	24	40.0
		More than four	32	53.3
9	Age at Attainment of Puberty (Years)	12–13	34	56.7
		14–15	18	30.0
		16–17	8	13.3
10	Source of Information about PCOD	Television	46	76.7
		Newspaper	1	1.7
		Mass media	13	21.7

Table 2. Knowledge regarding polycystic ovarian disease. (N = 60)

Knowledge level	Frequency	%
Inadequate	11	18.3%
Moderate	37	61.7%
Adequate	12	20%
Total	60	100.0

Table 3: Association between knowledge and selected demographic variables . (N=60)

S. No.	Demographic Variable	χ^2 Value	df	p-value	Significance
1	Age	8.898	2	0.064	NS
2	Gender	4.530	1	0.104	NS
3	Place of Living	6.930	1	0.140	NS
4	Religion	1.541	2	0.819	NS
5	Head of the Family	3.753	2	0.440	NS
6	Family Income	10.018	2	0.040	**S**
7	Type of Family	4.036	2	0.401	NS
8	Number of Family Members	2.308	2	0.679	NS
9	Age at Attainment of Puberty	13.510	2	0.009	**S**
10	Source of Information about PCOD	11.351	2	0.023	**S**

Cite this article as: E.Jayanthi et al. (2026). A study to assess the knowledge regarding polycystic ovarian disease among pharmacy students in sir Issac Newton College of pharmacy. International Journal of Innovative Research in Health Science, 2(7), 1–4