Knowledge Regarding PCOD and Its Preventive Lifestyle Measures Among the Nursing Students in Selected Nursing Colleges

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***Abstract*—Polycystic Ovarian Disease (PCOD) is a common endocrine disorder among women of reproductive age and is strongly influenced by lifestyle factors. Early awareness and adoption of preventive lifestyle measures are essential to reduce its complications. The present study aimed to assess the level of knowledge, attitude, and practice regarding PCOD and its preventive lifestyle measures among nursing students at KMCT College of Nursing. A descriptive research design was adopted for the study. The sample consisted of 100 nursing students selected using a convenient sampling technique from KMCT College of Nursing. Data were collected using a structured questionnaire to assess knowledge, a Likert scale to evaluate attitude, and a checklist to assess practices related to PCOD and its preventive lifestyle measures. The collected data were analyzed using descriptive and inferential statistics. The findings of the study revealed that the majority of students had adequate (96%) level of knowledge regarding PCOD, while a smaller proportion had poor knowledge (4%) Most of the participants exhibited a positive attitude towards the prevention and management of PCOD. However, the practice of preventive lifestyle measures such as regular physical activity, balanced diet, and stress management was found to be inadequate among several students. A significant association was observed between knowledge level and selected demographic variables. The study concludes that although nursing students have basic knowledge and a favorable attitude towards PCOD, there is a gap in the adoption of healthy lifestyle practices. Therefore, there is a need for structured educational programs and awareness initiatives to improve knowledge and promote effective preventive practices among nursing students.**

***Index Terms*—Knowledge, Attitude, Practice, PCOD, Nursing Students**

I. INTRODUCTION

Polycystic Ovarian Disease (PCOD), also referred to in clinical literature as Polycystic Ovary Syndrome (PCOS), is one of the most common endocrine disorders affecting women of reproductive age worldwide. It is a heterogeneous condition characterized by hormonal imbalance, irregular menstrual cycles, hyperandrogenism, and the presence of multiple small cysts in the ovaries. Over the past few decades, PCOD has emerged as a significant public health concern due to its increasing prevalence, long-term metabolic complications, and impact on the quality of life of young women. Globally, the prevalence of PCOD is estimated to range from 6% to 20%, depending on the diagnostic criteria used and the population studied. In India, recent epidemiological studies indicate a rising trend, particularly among adolescents and young adults. Rapid urbanization, sedentary lifestyles, dietary transitions toward high-calorie processed foods, psychological stress, and reduced physical activity have contributed substantially to this increase. As a result, PCOD is no longer considered merely a gynecological disorder but a multifactorial condition with reproductive, metabolic, psychological, and cosmetic implications. PCOD is associated with several clinical manifestations such as menstrual irregularities, infertility, acne, hirsutism, obesity, insulin resistance,

and mood disturbances. If left unmanaged, it may predispose women to long-term complications including type 2 diabetes mellitus, cardiovascular diseases, metabolic syndrome, and endometrial carcinoma. The chronic nature of the condition requires sustained lifestyle modification, early detection, and appropriate management strategies. Preventive lifestyle measures including regular physical exercise, balanced diet, weight management, stress reduction, and avoidance of harmful habits play a pivotal role in controlling symptoms and preventing complications. Adolescence and early adulthood represent critical periods for the development and early identification of PCOD. Nursing students, who are predominantly young women within the high-risk age group, are particularly vulnerable due to academic stress, irregular meal timings, lack of physical activity, and hostel living patterns. Furthermore, as future healthcare professionals, nursing students hold a crucial responsibility in educating and guiding the community regarding women's health issues. Adequate knowledge about PCOD and its preventive lifestyle measures among nursing students is essential not only for their personal health but also for their professional competence. Despite the growing burden of PCOD, awareness and understanding regarding its causes, symptoms, complications, and preventive strategies remain inadequate among young women. Misconceptions, social stigma, and lack of open discussion about menstrual and reproductive health often delay diagnosis and management. In many cases, symptoms are ignored or normalized, leading to late presentation and increased risk of complications. Hence, assessing the level of knowledge among nursing students becomes imperative to identify gaps and design appropriate educational interventions. Calicut, officially known as Kozhikode, is a major educational hub in the state of Kerala, with several nursing colleges catering to a diverse student population. Although Kerala is recognized for its relatively high literacy rate and better health indicators compared to many other Indian states, lifestyle-related disorders are on the rise. However, limited research has been conducted to evaluate the knowledge level regarding PCOD and its preventive lifestyle practices among nursing students in selected nursing colleges at Calicut. The present study aims to assess the knowledge regarding PCOD and its preventive lifestyle measures among nursing students in selected nursing colleges at Calicut. Understanding the existing level of knowledge will help in identifying deficiencies and planning structured awareness programs, workshops, and counselling sessions. It will also contribute to strengthening reproductive health education within nursing curricula and promote early adoption of healthy lifestyle practices. In conclusion, PCOD is a prevalent and growing health problem among young women, significantly influenced by modifiable lifestyle factors. Nursing students, being both at risk and future health educators, require comprehensive knowledge about this condition and its prevention. Therefore, this study is undertaken to systematically assess their knowledge and to provide a foundation for future health promotion strategies in the academic setting.

1.1 Problem Statement

A study to assess the knowledge regarding PCOD and its preventive lifestyle measures among the nursing students in selected nursing Colleges at Kozhikode District.

1.2 Objectives

- To assess the level of knowledge regarding PCOD and its preventive lifestyle measures among adolescent girls in KMCT College of Nursing.
- To assess the level of attitude regarding PCOD and its preventive lifestyle measures among adolescent girls in KMCT College of Nursing.
- To find out the association between level of knowledge with their selected demographic variables.

1.3 Hypothesis

H_1: There is a significant association between the level of knowledge regarding PCOD and its preventive lifestyle measures among nursing students and their selected demographic variables.

1.4 Conceptual Framework

A conceptual framework serves as a guide which in systematically identifying a precisely defined relationship between variables. Conceptualization is a process of forming ideas, which utilizes and forms conceptual framework from development of research design. The KAP model is a widely used behavioural framework in research that helps assess and

understand what people know (Knowledge), how they feel (Attitude), and how they act (Practice)regarding a specific topic

II. METHODOLOGY

- Research Approach: Quantitative research approach
- Research Design: Descriptive research design
- Setting of the Study: The study will be conducted at KMCT Nursing Colleges, Calicut.
- Population: All nursing students studying in KMCT Nursing Colleges, Calicut.
- Sample Size: The sample size will be approximately 100 students.
- Sampling Technique: A non-probability convenient sampling technique
- Variables: Knowledge, Attitude and Practice of Nursing students on PCOD.
- Demographic variables: Age, Gender, Year of study, Location of residence, Type of family, Religion, Previous knowledge regarding PCOD.

2.1 TOOL

Section A – Demographic proforma

It consists of 7 questions to collect Age, Gender, Year of study, Location of residence, Type of family, Religion and Previous knowledge regarding PCOD.

Section B – Self Structured Questionnaire

It consists of 15 questions to assess the knowledge regarding PCOD and its preventive measures.

Section C – Likert Scale

It consists of 18 items to assess the attitude of nursing students regarding PCOD and its preventive measures.

Section D – Practice Questionnaire

It consists of 15 items to assess the practice regarding PCOD and its preventive measures.

2.2 Data Collection

Data collection was started after obtaining ethics committee clearance and permissions from ethical authorities at KMCT college of Nursing. The subjects were selected by non-probability convenience sampling.

2.3 Ethical Considerations

The research proposal was presented in front of the research committee of KMCT College of Nursing and approval was obtained. Ethical clearance for the study was obtained. Informed consent was obtained from the subjects.

III. RESULTS

Section 1 - Sample Characteristics

Demographic variables of selected Nursing students: According to the age majority of the nursing students (75%) were in the age group of 20–22 years, followed by 13% in the 23–25 years group, 8% in the 17–19 years group, and 4% above 25 years. Regarding gender, 65% were female and 35% were male. Most of the students (67%) were studying in the 4th year B.Sc. Nursing, followed by 31% in the 3rd year and 2% in the 2nd year BSc Nursing. More than half of the students (54%) belonged to rural areas, while 46% were from urban areas. Regarding family type, 87% belonged to nuclear families and 13% to joint families. In terms of religion, 44% were Muslim, 41% Hindu, 13% Christian, and 2% belonged to other religions. The majority of the students (68%) reported having previous knowledge about PCOD, whereas 32% had no previous knowledge.

Table 1: Frequency (Percentage) distribution of sociodemographic characteristics of the sample. YY

Sl No	Demographic variables	frequency	percentage
1	Age		
	17-19 years	8	8%
	20-22 years	75	75%
	23-25 years	13	13%
	Above 25 years	4	4%
2	Gender		
	Male	35	35%
	Female	65	65%
	Prefer not to say	0	0%
3	Year of Study		
	1st year Bsc nursing	0	0%
	2nd year Bsc nursing	2	2%
	3rd year Bsc nursing	31	31%
	4th year Bsc nursing	67	67%
4	Location of residence		
	Urban	46	46%
	Rural	54	54%
5	Type of family		
	Nuclear	87	87%
	Joint	13	13%
6	Religion		
	Hindu	41	41%
	Muslim	44	44%
	Christian	13	13%
	Others	2	2%
7	Previous Knowledge		
	Yes	68	68%
	No	32	32%

Section 2 - Assessment of knowledge regarding PCOD and its preventive lifestyle measures among nursing students

The study shows that 96 % of the students have good knowledge about the PCOD, 4 % have average knowledge about PCOD.

Table 2: Frequency distribution of knowledge level of selected Nursing students.

SI NO	CATEGORY	NUMBER OF STUDENTS	PERCENTAGE
1	GOOD KNOWLEDGE	96	96%
2	AVERAGE KNOWLEDGE	4	4%
3	POOR KNOWLEDGE	0	0%

Section 3 Assessment of attitude regarding PCOD and its preventive lifestyle measures among nursing students

The study shows that 38 % students have positive attitude, 49% have moderate attitude and 13 % have negative attitude towards PCOD.

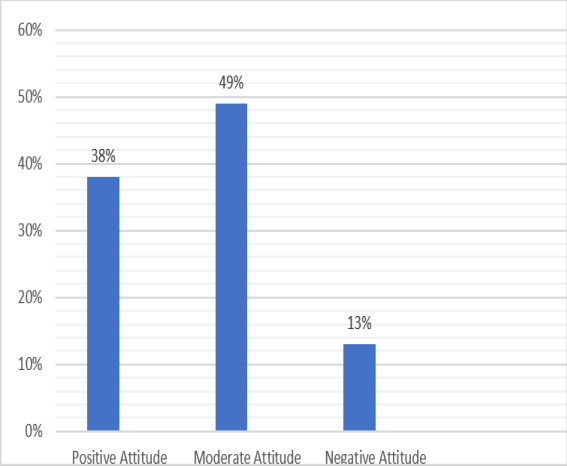


Fig 1: The figure shows the distribution of frequency and percentage of the sample according to attitude.

Section 4 Assessment of practice regarding PCOD and its preventive life style measures among nursing students

The study shows that 40% of the students have adequate practice, 31% have moderate practice and 29% have inadequate practice regarding PCOD and its preventive lifestyle measures.

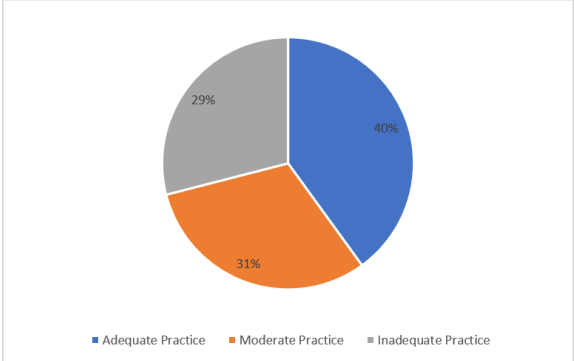


Fig 2: The figure shows the distribution of frequency (percentage) of the sample according to the practice.

Section 5 Association Between Selected Demographic Variable and Knowledge

There was a significant association between the level of knowledge regarding PCOD and selected variables such as Gender and Year of study. There is no association between level of knowledge and variables such as age, location of residence, type of family, religion and previous knowledge.

IV. DISCUSSION

The present study aims to assess the knowledge, attitude and practice regarding the PCOD and its preventive lifestyle measures among the nursing students in selected nursing colleges at Kozhikode District. A total of 100 sample was taken using convenient sampling technique. Data was collected using self-structured questionnaire. The description tool was divided into 4 sections. Section -A Demographic data, Section -B Knowledge questionnaire, Section - C Attitude scale and Section - D Practice checklist. The study revealed that 96% (96) have good knowledge, 38% (38) have good attitude and 31% (31) has good level of practice. The present study was supported by similar study

“A Descriptive study was conducted by Kesari, Swati; Sonam, Kumari Sonam; Kumari, Neetu on October – December 2024 the topic “Understanding PCOD: Knowledge and Perceptions Among Female Faculty at Gurugram College: A Step Toward Awareness and Education". The design used on the study was descriptive and the samples were 70 non-medical female faculties in SGT university, Gugaon and the tools used for data collection is questionnaire. It was found that 4.28% had poor knowledge, 64.30% had

average knowledge, and 31.40% had good knowledge."

"A Quasi Experimental study was conducted by S. Kadam, Shruti on July 2018 at Hubballi, India on the topic 'A comparative study to evaluate the effectiveness of lecture method and video assisted teaching on knowledge regarding Polycystic Ovarian Disease (PCOD) and its management among adolescent girls of selected PU colleges, Hubballi. An evaluative study was conducted among 60 adolescent girls of selected PU colleges of Hubballi who were A similar Descriptive study was conducted by Kesari, Swati; Sonam, Kumari Sonam; Kumari, Neetu on October – December 2024 on the topic "Understanding PCOD: Knowledge and Perceptions Among Female Faculty at Gurugram College: A Step Toward Awareness and Education". The design used on the study was descriptive and the samples were 70 non-medical female faculties in SGT university, Gugaon and the tools used for data collection is questionnaire. It was found that 4.28% had poor knowledge, 64.30% had average knowledge, and 31.40% had good knowledge.

V. RECOMMENDATIONS

1. A similar study can be replicated as a large sample and in other settings.
2. A similar study can be conducted by using quasi quasi-experimental design.
3. The follow-up study can be done to assess the effectiveness of a structured teaching program in PCOD and its preventive measures among the nursing students.

VI. CONCLUSION

The present study aimed to assess the knowledge, attitude and practice regarding PCOD and its preventive lifestyle measures among the nursing students in the selected nursing colleges at Kozhikode district. A descriptive research design was used after obtaining the formal permission from the concerned authority. 100 students were selected from KMCT College of Nursing using convenient sampling technique based on inclusion criteria. Assessment was done using a self-structured questionnaire and Likert scale. The theoretical framework for the study was developed using the concept from Health Belief Model. The collected data was categorized and analysed based on study objectives and hypothesis. The study revealed that 96% (96) have good knowledge, 38% (38) have good attitude and 31% (31) has good level of practice.

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