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A STUDY TO ASSESS THE KNOWLEDGE ON PCOS AMONG NURSING COLLEGE STUDENTS IN DHARMAPURI, TAMILNADU

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ABSTRACT:

The aim of the study is to assess the knowledge on PCOS among Nursing college students in Dharmapuri.

OBJECTIVES OF THE STUDY

1)To assess the level of knowledge regarding PCOS among nursing students

2)To find out the association between level of knowledge and their selected demographic variables.

Methodology

The research methodology is the systemic analysis of the procedures applied to a field of study. This chapter deals with the steps taken to conduct the present study in order to assess the level of knowledge on PCOS among Nursing college students in Dharmapuri, Tamilnadu. It consists of Research approach, design, population setting, sample size, sampling technique, Criteria for sample selection, pilot study, description of tool, data collection and data analysis.

Results:

The maximum number of samples (49%) had good knowledge, 42% of samples had average knowledge, 6% of samples had poor knowledge, and only 3% had excellent knowledge regarding PCOS. Statistically, no association was found between the level of knowledge and demographic variables such as age in years, educational status, type of family, living area, father's occupation, mother's occupation, family monthly income, and family history except religion.

Conclusion:

The study concludes that less than half of the nursing students (49%) have good knowledge.

These results shows that extensive health awareness programs were required to bring awareness and enhance the knowledge among nursing college students. So, nurses ought to empower to progress information among college students on PCOS by organizing the health awareness programs in colleges to bring down the mortality and morbidity to create country sound.

Key terms:

assess, level of knowledge, PCOS (poly cystic ovarian syndrome), nursing college students, Self-administered knowledge questionnaire.

I. INTRODUCTION

Background of the study

Poly cystic ovary syndrome (PCOS) is a common hormonal condition that affects an estimated 8–13% of reproductive-aged women. It usually starts during the adolescent period, but symptoms may fluctuate over time. In whole world Up to 70% of affected women remain undiagnosed. PCOS leads to hormonal imbalances, irregular periods, excess estrogen levels, and cysts in the ovaries. Irregular periods due to a lack of ovulation can make it difficult to become pregnant. PCOS is a leading cause of infertility. PCOS is a chronic condition and cannot be treated. However, some symptoms can be improved through changes in lifestyle, medications, and fertility treatments.

The term poly cystic ovarian syndrome was to start with depicted by Irving Stein and Michael Leventhal as a set of three of "amenorrhoea," "obesity, and „hirsutism in 1935 when they observed the association between corpulence and regenerative disorders. It is otherwise known as the „Stein-Leventhal Syndrome‟ or „Hyper androgenic an ovulation‟ and is the preeminent common endocrine ovarian clutter impacting around 2-8% of women of regenerative age. PCOS Now a days, it is additionally insinuated to as the „Syndrome O‟ i.e., over food, overproduction of insulin, ovarian perplexity, and ovulatory disturbance.

The pathophysiology capable of the advancement of poly cystic ovaries has perplexed gynecologists and endocrinologists for a long time and has demonstrated exceptionally troublesome to characterize. Be that as it may, the most common pathogenesis still can be hormonal awkwardness and affront resistance. PCOS is related to expanded metabolic and cardio-vascular chance components due to expanded affront resistance. In more than 40% of cases, PCOS is related to corpulence as well as impeded glucose resilience, type 2 diabetes, and metabolic disorders. India has seen approximately a 30% rise in PCOS cases within the final couple of years. Need of information and way of life changes are considered to be the major figures driving the fast increment in rate of PCOS in later a long time, coming about in complications. Mindfulness of PCOS indications and complications among the well being care specialists is basic for early treatment and to anticipate genuine complications.

It is exceptionally troublesome to analyze this disorder within the early stages of youth, as their primary concerns are with respect to the stylish appearance and barely center within the upkeep and well-being of their claim well being. Expanded peer interaction and display societal belief systems to advance inactive ways of life and moment nourishment propensities have made it more self-evident for the teenagers to create this disorder. PCOS cannot be avoided, but once analyzed, it is exceptionally vital to take after the treatment enlightening and adjust the way of life in like manner to anticipate assist complications.

Need for the study :

According to a study by the PCOS Society, one in every 10 ladies in India has poly cystic ovary disorder (PCOS), a common endocrinal framework clutter among ladies of regenerative age. And out of each 10 ladies analyzed with PCOS, six are adolescent young ladies. A populace thinks about uncovered that plain and mysterious PCOS accounted for 90% of patients with oligomenorrhea and 37% with amenorrhoea, or 73% with oligo- or amenorrhoea. Oligo- or amenorrhea accounted for 21% of couples with barrenness, and the yearly frequency was 247 patients per million of the common populace. The yearly frequency of infertility due to PCOD per million was 41 with plain PCOD and 139 with mysterious PCOD (add up to 180). Of those, 140 appeared to reply well to clomiphene (78%) but 40 (22%) failed, requiring elective treatment. A ponder on young girls and college young ladies in a few colleges around India was found to appear a better rate of college young ladies with PCOD, and there was around 36% of an increment in cases of PCOD compared from a period of 2007-08, appearing an extreme quick increment of cases of PCOD among college girls in a disturbing rate.

Youth may be an arrangement of physical and mental improvement that regularly happens between puberty and adulthood. Utility varieties within the hypothalamic-pituitary-ovarian hub amid normal. Adolescence causes changes in regenerative hormones and menstrual designs that imitate a few of the side effects of PCOS, making the determination of the condition more challenging in youthful female populations. Menstrual cycles are regularly less frequent in females with PCOS. Their levels of additional male hormones lead to the advancement of different little collections of liquid within the ovary known as follicles, and they may moreover have ovulation disappointment. Hyper insulinemia and affront resistance are regularly connected. Young people with PCOS are more likely to encounter mental and sub clinical eating issues, as well as pity and uneasiness. In the event that treated within the early pre-adult arrange, it is effectively mended. Since

controlling month-to-month abnormality cycles and hirsutism is the essential clinical concern in PCOS. patients, verbal contraceptives (OCs) may be used in the perfect circumstance, whereas carefully weighing the common administration-related contraindications. Youngsters who are stout ought to make way for life. changes; in some cases, metformin may too be managed, particularly on the off chance that glucose tolerance is displayed. In case hormonal treatment does not improve hirsutism, anti-androgen treatments ought to be proposed.

There are holes within the understanding of the a few truths of PCOS in youngsters. This alludes to a need for longitudinal thinking among youths, a need for particular symptomatic benchmarks to recognize PCOS amid this period, a need for standardizing values for a number of biochemical markers, and a need for clarity with respect to whether the seriousness of side effects at this age precisely predicts the degree of disturbance in afterward life. Shockingly, the predominance of PCOS in teenagers is under-diagnosed and under examined. The most likely cause of this event is thought to be a need for understanding of the condition and its indications. Youngsters ought to be made more mindful of the issue in order to anticipate genuine events of ripeness issues within the future. So, the current research studies were carried out to assess the level of knowledge regarding PCOS among nursing college students in Dharmapuri.

II. METERIAL AND METHODOLIGY:

Research Approach: Quantitative evaluative approach
Research design: descriptive research design
Setting of the study : Swami Vivekananda College of Nursing, Dharmapuri.
Study Sample: Nursing students those who are studying at Bsc(N) III and IV year in Swami Vivekananda College of Nursing
Sample size: 100 Nursing college students
Sampling technique: Non-randomized purposive sampling technique

CRITERIA FOR SAMPLE SELECTION:

1. Inclusion criteria

Nursing College students those
- who wwere studying in BSc(N) III and IV year
- who were Willing to participate in the study.
- who were available at the time of data collection

2. Exclusion criteria

Nursing college students those
- who were studying in BSc(N) I and II year
- who were not willing to involve in the study.
- who were not available during the time of data collection.

DEVELOPMENT AND DESCRIPTION OF THE TOOL

The study was carried out by employing a structured knowledge questionnaire on poly cystic ovarian syndrome. It was created with the assistance of broad review literature, books, journals and consulting specialists within the field of Community and Obstetrical Nursing. Validity and reliability of the instrument was obtained from experts.

The questionnaire for the present study was classified into section-A and section-B

SECTION A: Socio-demographic variables

1. Age in years
2. Educational status
3. Religion
4. Type of family
5. Living area
6. Educational status of the parents
7. Father's occupation

8. Mother's occupation
9. Family monthly income
10. Family history of PCOS

SECTION B: Self-structured knowledge questionnaire on PCOS

It consists of 25 questions about PCOS knowledge. Among the 25 items, 5 from the introduction, 5 from signs and symptoms, 2 from diagnostic evaluation, 3 from treatment, 3 from prevention, and 2 from complications regarding PCOS were chosen. Each correct answer has a score of 1, and each incorrect answer has a score of 0. The maximum possible score is 25. The obtained Nursing college students knowledge score is graded as follows:

SCORE INTERPRETATION FOR SECTION :B

Table:1

SCORE	INFERENCE
0-35%	Poor knowledge
36-59%	Average knowledge
60- 79%	Good knowledge
80% and above	Excellent Knowledge

CONTENT VALIDITY

Content validity is defined as the degree to which the items in an instrument adequately represent the universe of the content being measured. The tool was submitted to 5 experts of community health nursing and Obstetrical and Gynaecological Nursing . The tool were modified based on the suggestions given by the experts and final draft was prepared and incorporated in pilot study

RELIABILITY OF THE TOOL

Reliability of the instrument is characterized as the degree to which an experiment, test, or measuring procedure yields the same out come on repeated test. It concerns with steadiness inner consistency and homogeneity.

The Cronbach's alpha reliability method was used to establish the reliability. The tool was administered to 10 members studying at Omsakthi College of Nursing, Dharmapuri. The reliability score was r = 0.96, which indicates that the tool was highly reliable.

PILOT STUDY:

The pilot study is a small form of a trait run done in preparation for major studies; formal consent was obtained from the college authority. A pilot study was conducted on 10 college students in Omsakthi College of Nursing, Dharmapuri, who satisfy the inclusion criteria were chosen and obtained consent from them by building up good rapport.

PROCEDURE FOR DATA COLLECTION:

The research study was conducted with college students studying at Swami Vivekananda College of Nursing, Dharmapuri. The researcher initially establishes rapport with the study samples, then the questionnaire was administered to collect data from nursing college students. The time duration of 30 minutes was taken by the researcher for each sample. The researcher maintained confidentiality and had no difficulty in collecting the data.

III. DATA ANALYSIS

The research study findings were analyzed based on the objectives with the help of descriptive and inferential statistics.

DESCRIPTIVE STATISTICS:

- Frequency and percentage distribution were used to assess Socio demographic variables among nursing college students.
- Percentage, mean distribution, and standard deviation were used to estimate the level of knowledge among nursing college students.

INFERENTIAL STATISTICS: A chi square test was used to identify the association between knowledge regarding poly cystic ovarian syndrome and their selected Socio demographic variables among nursing college students.

IV. FINDINGS OF THE STUDY:

Frequency and percentage distribution of samples based on Socio demographic variables

TABLE-2 N= 100

S.NO	SOCIO-DEMOGRAPHIC VARIABLE	FREQUENCY	PERCENTAGE (%)
1	Age in years		
	a) 20	44	44
	b) > 20	56	56
2.	Educational status		
	a) Bsc (N) III year	50	50
	b) Bsc (N) IV year	50	50
3.	Religion		
	a) Hindu	95	95
	b) Christian	4	4
	c) Muslim	1	1
	d) Others	-	-
4.	Type of family		
	a) Joint family	38	38
	b) Nuclear family	60	60
	c) Extended family	2	2
5.	Living area		
	a) Rural	76	76
	b) Urban	14	14
	c) Semi urban	10	10
6.	Educational status of parents		
	a) Father only literate	26	26
	b) Mother only literate	12	12
	c) Both are literate	39	39
	d) Both are iliterate	23	23
7.	Father’s occupation		
	a) Govt. employee	11	11
	b) Private employee	3	3
	c) Coolie worker	82	82
	d) Business	1	1
	e) Unemployed	3	3
8	Mother’s occupation		
	a) Govt. employee	3	3
	b) Private employee	4	4
	c) Coolie worker	68	68
	d) Business	0	0
	e) Unemployed	26	26
9.	Family monthly income		
	a) <Rs. 10,000/-	52	52
	b) Rs. 10,001-15,000/-	25	25
	c) Rs. 15,001-20,000/-	12	12
	d) >Rs. 20,000/-	11	11

10.	Family history of PCOS		
	a) Yes	6	6
	b) No	94	94

The above table depicts the frequency and percentage distribution of samples.

According to the age of the samples, the majority (56%) belongs to above 20 years, and the remaining 44% belongs to 20 years.

Based on the educational status of the samples, 50% belong to B.Sc. (N) III year, and the remaining 50% belong to B.Sc. (N) IV year.

In terms of religion, the majority (95% of the samples) belongs to Hindu, the least samples (4%) belong to Christian, and the very least samples belong to Muslim, and no one sample belongs to another category of religion.

Depends upon the type of family, majority 60% of the samples belong to the nuclear family, more than one third of the samples belong to the joint family, and the very least samples belong to the extended family.

According to the living area, majority 76% of the samples belong to rural areas, the least samples, 14%, belong to urban areas, and the very least samples, 10%, belong to semi-urban areas.

Based on the educational status of the parent's majority 39% of the samples parents both were literate, one fourth of the samples 26% father's only literate, nearly one fourth of the samples 23% of the parents both were literate, and the least sample 12% mothers only literate.

According to the father's occupation, the majority (82% of the samples) fathers were coolie workers, the least samples (11%) fathers working as government employees, the very least samples (3%) working as private employees and unemployed, respectively, and only 1% of the samples father's occupation was business.

Based on the mother's occupation, the majority (68% of the samples) mothers were coolie workers, one-fourth of the samples (26%) mothers were unemployed, the least samples (4%) working as private employees and 3% working as government employees, and no one of the samples mother's occupation was business.

In terms of family monthly income, the majority (52% of the samples) monthly income was less than Rs. 10,000/-, one fourth of the samples 25% income was Rs. 10.001-15,000/-, the least samples 12% monthly income was Rs. 15,001-20.000/-, and the very least samples 11% income was more than Rs. 20,000/-.

According to the family history of PCOS, the majority (94% of the samples) were not having the family history of PCOS, and the least sample 6% had the history of PCOS.

FREQUENCY, MEAN, MEAN PERCENTAGE AND STANDARD DEVIATION

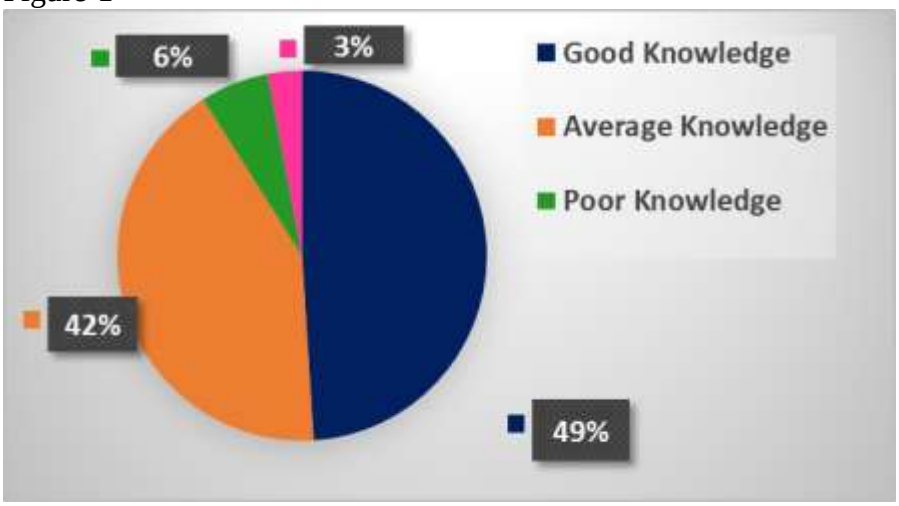
TABLE-3

FREQUENCY	MEAN	MEAN PERCENTAGE	S.D
100	14.18	56.72	3.5458

The above table depicts that the mean value of this research study was 14.18, the mean percentage was 56.72, and the standard deviation was 3.5458.

Frequency and percentage distribution of level of knowledge on poly cystic ovarian syndrome among nursing college students.

Figure-1 N=100



The figure 1 shows that level of knowledge on PCOS among the samples. Among the 100 nursing college students, 49 (49%) had good knowledge, 42 (42%) of them had average knowledge, 6 (6%) had poor knowledge, and only 3 (3%) of them had excellent knowledge.

Association between the level of knowledge of samples and their selected demographic variables

TABLE-4

S.NO	DEMOGRAPHIC VARIABLE	$x2$	Df	P
1.	Age in years	6.39	Df=9	16.91 (NS)
2	Educational status	13.12	Df=9	16.91 (NS)
3	Religion	39.60	Df=6	12.59 (S) *
4	Type of family	11.16	Df=6	12.59 (NS)
5	Living area	7.10	Df=6	12.59 (NS)
6	Educational status of parents	8.47	Df=9	16.91 (NS)
7	Father's occupation	3.47	Df=12	21.02 (NS)
8	Mother's occupation	12.69	Df=9	16.91 (NS)
9	Family monthly income	2.59	Df=9	16.91(NS)
10	Family history of PCOS	0.83	Df=3	7.81(NS)

Note: * = Significant at 0.05 level

NS = Not Significant

Table 4 shows that there was a significant association between religion and level of knowledge on poly cystic ovarian syndrome among nursing college students, significant at the 0.05 level.

Whereas the Socio demographic variables like age in years, educational status, type of family, Living area, educational status of parents, father's occupation, mother's occupation, family monthly income, and family history of PCOS had no significant association with knowledge on poly cystic ovarian syndrome among nursing college students.

DISCUSSION

The purpose of the study was to assess the level of knowledge regarding PCOS among nursing college students in Dharmapuri.

This study was conducted to assess the level of knowledge on PCOS among 100 nursing college students. The research samples were selected by the purposive sampling technique. The sociodemographic variables and

structured knowledge questionnaire on PCOS tools were utilized to collect the data from the samples. The collected data were analyzed by using descriptive and inferential statistics.The results of the study were discussed based on the objectives.

The first objective of the study was to assess the level of knowledge regarding PCOS among nursing students. Among the 100 nursing college students, 49 (49%) had good knowledge, 42 (42%) of them had average knowledge, 6 (6%) had poor knowledge, and only 3 (3%) of them had excellent knowledge.

This finding is supported by Mrs.K. Vijayamma et al. (2023), who conducted a study to assess the knowledge regarding polysystic ovarian disease among college girls in selected government colleges in Tirupati. This study's findings show that among college girls, 49 (49%) of the sample had moderate knowledge, 43 (43%) of them had inadequate knowledge, and only 8 (8%) of them had adequate knowledge on polycystic ovarian disease.

The second objective of this study was to find out the association between level of knowledge and selected demographic variables. The study result describes that there was a significant association between religion and level of knowledge on polycystic ovarian syndrome among nursing college students, significant at the 0.05 level.

Whereas sociodemographic variables like age in years, educational status, type of family, living area, educational status of parents, father's occupation, mother's occupation, family monthly income, and family history of PCOS had no significant association with knowledge on poly cystic ovarian syndrome among nursing college students.

The mean value of the study was 14.18, the mean percentage was 56.72, and the S.D. was 3.5458.

NURSING IMPLICATION:

The findings of the study have implications in different fields of nursing, that is, nursing practice, nursing education, nursing administration, and nursing research.

Nursing Practice:

This study finding implies that educational programs can be conducted by the nursing personnel in nursing colleges, which will help to enhance the knowledge on PCOS and to prevent the same problem in the future.

Nursing Education:

The researcher had drawn the following implication for nursing education. Nursing educators can encourage the student nurses to conduct awareness programs on PCOS in community areas.

The nursing curriculum should prepare nurses to motivate people to improve knowledge on PCOS.

Nursing Administration:

Nurse administrators manage nursing staff activities and can assign various duties to nurses and provide and organize awareness health programs on PCOS.

The nursing administrative department must support the nursing staff in arranging regular health education for visiting the college, and periodic surveys should be done to evaluate the program. A nurse can be appointed for a college visit to identify the students in need of support and information.

Nursing Research:

The modern world gives prime importance to evidence-based practice. Research plays an important role in widening our knowledge base. Nursing research helps the nurses to change their practice and improve the client outcome. It will help them focus on the areas where they need to pay attention. The study revealed that there is a knowledge deficit regarding PCOS among college students. The nurse administrators and nurse educators should encourage and motivate the nurses and the nursing students to come up with similar research topics to fill the gap between theory and practice.

LIMITATION

This study was limited to nursing college students.

- ➢ those who were studying BSC (N) III and IV year
- ➢ those who were studying at Swami Vivekananda College of Nursing, Dharmapuri.

RECOMMENTATION:

Based on the research results, the recommendations are given as follows:

- A study can be conducted among different age groups of college students.
- A similar study can be conducted with large samples to generate the findings.
- Experimental studies can be conducted with different college students.
- The comparative study can be conducted between urban and rural areas of the community.

V. CONCLUSION

The study concludes that only 49% of the nursing students have good knowledge. Hence, health promotion programs or awareness programs are needed to enhance the knowledge regarding PCOS among nursing college students.

The nursing college authorities should take the responsibilities on their shoulders to enhance the knowledge on PCOS among nursing college students. This will be very helpful for the community people to receive the health care services from nursing students on PCOS to reduce the mortality and morbidity due to PCOS.

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