Awareness of PCOS (Polycystic Ovarian Syndrome) among Nursing Students

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Abstract: *Polycystic ovarian syndrome is a condition in which woman has an imbalance of female sex hormones. This may lead to changes in the menstrual cycle, cyst in the ovary, failure to conceive and other health problems. It is a common health problem among teenagers and young women. It affects 5% to 10% of women in their reproductive age. Awareness and accurate diagnosis is the first step in managing PCOS as it improves quality of life of the patient. The study was conducted to assess the knowledge on PCOS among nursing students. Methods: A Non experimental Descriptive Research Design was adopted to conduct the study. A total of 92 samples were selected by using non-probability purposive sampling technique. The data was collected from the students by using structured questionnaire. The collected data were analyzed by using Simple proportions, and Chi-squared test. A p-value of < 0.05 was considered statistically significant. Results: In present study, 67.39% girls had normal BMI, 25% were underweight, and 4.35% were overweight, while 3.26% were obese. 25% females had acne, 19.57% had irregularity of menses, 2.18% had hirsutism and 3.26% (3 students) were diagnosed as PCOS. In present study, 100% of the sample had information about PCOS. 54% of the samples had information about PCOS from teacher, 38% got information from mass media. This study findings reveal that 53.26% of the sample had moderate knowledge, 30.44 % of the sample had poor knowledge and 16.3% of the sample has good knowledge on PCOS respectively. Conclusion: The results of this analysis demonstrated clearly that nursing students needed a wide range of educational counseling about how to manage PCOS.*

Keywords: PCOS, Nursing students, teenage, self-esteem, acne, infertility, overweight

1. Introduction

Polycystic ovarian syndrome is a condition in which woman has an imbalance of female sex hormones. This may lead to changes in the menstrual cycle, cyst in the ovary. It is a common health problem among teenagers and young women. It affects 5% to 10% of women in their reproductive years. PCOS is associated with many health consequences, both of immediate (poor self-esteem, acne) and long-term (diabetes, heart disease, metabolic syndrome, infertility) concern. Although there is no cure for PCOS, there are several ways to treat and manage the condition. If a girl is overweight, Weight loss can be very effective in lessening many of the health conditions associated with PCOS. Sometimes weight loss alone can restore hormone level to normal, causes many of the symptoms to disappear or become less severe. Healthy food habits and exercise helps to combat the weight gain. Research has suggested that PCOS may be related to increased insulin production. Lack of knowledge and lifestyle changes are considered to be the major factor leading to this phenomenon. There is a need to increase awareness among students, so as to avoid major cases of fertility problems in the future. A Nurse holds a critical role in health care that goes beyond the day to day duties. Nurses are in a position to provide comprehensive care to adolescent afflicted with the syndrome.

Objectives
1) To determine the preexisting knowledge of nursing students on PCOS.
2) To find an association between knowledge score of nursing students on PCOS with demographic variables.

Hypothesis
There is association between knowledge score of nursing students on PCOS with demographic variables

2. Material and Methods

A Non experimental Descriptive Research Design was adopted to conduct the study. The study was conducted among students of fourth year BSc (Nursing), Sree Mookambika College of Nursing, Kulasekharam, Kanyakumari District, TamilNadu. Total number of students in fourth year BSc (Nursing) was 100. A total of 92 samples was selected by using Non-probability purposive Sampling Technique (8 students were absent at the time of data collection). . The data were collected from the students by using structured questionnaire. It consisted of 30 questions about PCOS. The obtained data were analyzed and tabulated, descriptive statistics as frequencies, and percentage were calculated using computer. Chi- square test also used and P value less than 0.05 was considered as statistically significant.

3. Findings

1) Description of demographic and clinical variables of Nursing Students

Majority(55.43%) of the sample belong to 20-21 years of age group. 55% of the sample belong to Christian religion. 73.91 % of the samples have less than Rs.10000 as family's monthly income. 100% of the sample had information about PCOS. 54% of the samples had information about PCOS from teacher, and 38% got information from mass media.. Regarding clinical variables, 67.39% girls had healthy BMI, 25% were underweight, and 4.35% were overweight, while

3.26% were obese. 25% females had acne, 19.57% had irregularity of menses, 2.18% had hirsutism and 3.26% (3 students) were diagnosed as having PCOS. 4.35 % of the sample underwent ultrasound investigation. 44.56 % of the sample seen gynecologist.

Table 1: Frequency and Percentage Distribution of Demographic variables and Clinical Variables of Nursing Students (N=92)

Demographical Variable	Categories	N	Percentage
Age (years)	20-21`	51	55.43
	22-24	41`	44.57
Religion	Hindu	42	45.65
	Christian	50	54.35
	Muslim	0	0
Family monthly Income (In Rupees)	≤ 10000	68	73.91
	>10000	24	26.09
Sources of information	Teachers	54	58.70
	Mass Media	38	41.70
Clinical Variables BMI	<18.5 (Underweight)	23	25.00
	18.5-24.9 (Healthy)	62	67.39
	25-29.9 (Over weight)	3	3.26
	≥30 (Obese)	4	4.35
Type of Diet	Vegetarian	0	0
	Non- Vegetarian	0	0
	Mixed	92	100
History of Irregular Menstrual Cycle	Yes	18	19.57
	No	74	80.43
Presence of Acne	Yes	23	25
	No	69	75
Presence of Excessive Facial Hair	Yes	2	2.18
	No	90	97.82
Have you diagnosed as having PCOS	Yes	3	3.26
	No	89	96.74
What Investigation have been done	Yes (Ultra sound)	4	4.35
	No	88	95.65
Type of Consultation	Gynaecologist	41	44.56
	Dermatologist	1	1.09
	Endocrinologist	0	0
	Any other	1	1.09
	No Consultation	49	53.26

2) Knowledge of Nursing Students on PCOS

Assessment of level of knowledge of nursing students on PCOS shows that 30.44% of the students had poor knowledge, 53.26% of the students had average knowledge and 16.30% of the students had good knowledge about PCOS.

Table 2: Frequency and Percentage Distribution of Nursing Students' Knowledge about PCOS (N=92)

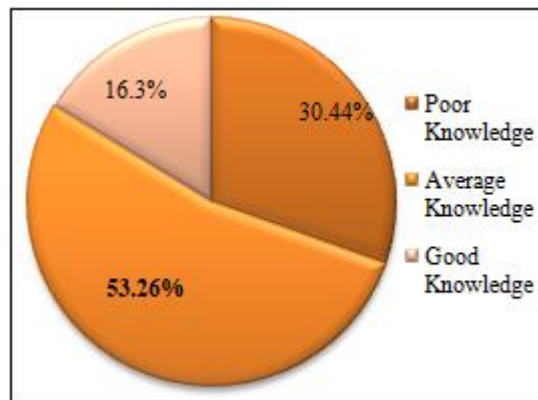| Score	Knowledge category	Frequency	Percentage
0-15	Poor Knowledge	28	30.44
16-20	Average Knowledge	49	53.26
20-30	Good Knowledge	15	16.30

Figure 1: Knowledge about Polycystic Ovarian Syndrome

3) Association between Knowledge of Nursing Students regarding PCOS and Demographic Variables

The present study findings revealed that there was no significant association between knowledge on PCOS and demographic variables of samples.

Table 3: Association between Knowledge and Demographic Variables of respondents

Demographic Variable	df	Table Value (P<0.05)	Calculated Value(χ^2)	Inferences
Age	2	5.99	0.41	Not Significant
Religion	2	5.99	0.36	Not Significant
Family monthly Income	2	5.99	0.058	Not Significant
Sources of information	2	5.99	0.93	Not Significant

4. Conclusion

Investigator concludes that, the present study revealed significant gaps in nursing students knowledge of certain aspects in PCOS especially management of PCOS. Hence the knowledge of the disorder and counseling for adolescents should be included in the curriculum which will provide awareness towards the disorder and lifestyle modification.

5. Recommendation

1) A similar study may be conducted among reproductive age group
2) A similar study can be conducted with large number of samples
3) A comparative study can be done among school children and college students
4) A comparative study can be done among adolescents in urban and rural area

Conflicts of interest- None declared.

Source of Funding- Self

6. Ethical Clearance

The ethical clearance was obtained from the Doctoral committee of Sree Mookambika College of Nursing. Oral

consent was obtained from the samples before collection of data by explaining the purpose of this study and its importance for each student. After getting the oral consent, an explanatory letter and the questionnaire were handed out to the samples. The explanatory letter provided a credible and meaningful explanation of the research intention. The researcher remained with the participants, informing them of the strategies employed to protect their anonymity and other safeguards taken to protect their identities prior to publication. They were also assured that their responses would be kept confidential. The ethical principles of guaranteeing the principles of honesty, confidentiality, privacy, avoidance of harm and informed consent underpinned the total research process.

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