A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Polycystic Ovarian Syndrome among B.Sc Nursing Students of Kalawati Nursing and Paramedical Institute, Kasganj, Uttar Pradesh

Dr. Darjilin Kanmoni[1], Mr. Chartrapal Sahu[2], Mr. Aakash[3], Ms. Akansha[4], Ms. Arju Verma[5], Ms. Arti[6], Ms. Kiran[7], Mr. Devashish[8], Mr. Dushyant Rajput[9], Ms. Faiza Malik[10], Mr. Hariom[11], Mr. Ishan Kant[12]

[1]Professor cum Principal, [2]Lecturer,
[1,2,3,4,5,6,7,8,9,10,11,12]Kalawati Nursing and Paramedical Institute, Kasganj, Uttar Pradesh, India

ABSTRACT

PCOS is most common non-communicable disease in females after hypertension and diabetes mellitus in India. It has been found through studies that it affects around 5% to 10% of women in their reproductive years. It is associated with negative metabolic, reproductive, endocrine, and psychological consequences among women in reproductive age. Many girls with chronic menstrual irregularities could have PCOS. Lack of knowledge and poor lifestyle choices are considered to be the major factor leading to this syndrome. Nurses are in unique position to create awareness regarding this syndrome.

In pre - test conducted among the 30 respondents, 18 (60%) have Inadequate knowledge, 9 (30%) of them have moderate knowledge and 3 (10%) of them have adequate knowledge reagarding PCOS. The post-test was conducted to the same respondents after one week of time. During post-test 28 (93.33%) respondents have adequate knowledge, 2 (6.66%) respondents have moderate knowledge and none of them have inadequate knowledge.

The average mean score of the Pre – test is 10.67 and the average means score of post-test is 24.53. The difference between the pre-test and post-test is 13.86. The SD of pre-test is 7.26 and post-test is 3.62. The SD difference is 3.64. The 't' value is 9.362 and 'df' score is 58.

KEYWORDS: *Polycystic Ovarian Syndrome, adolescent girls, knowledge, Structured Teaching Programme*

INTRODUCTION

Polycystic ovarian syndrome (PCOS) is an endocrine disorder which commonly affects the adolescent girls. Adolescent period is an unique period where there is a change from childhood to adulthood, a time of physiological, psychological, social and emotional adaptation. During this period individual attains physical and sexual maturity, whereas emotional maturity will be imbalanced. The changes in adolescent period have important implications to understand the health risks associated with this syndrome [1]. It affects 5% to 10% of women in their reproductive years [2]. It has a wide range of presentation in adolescents as menstrual irregularity, hirsutism, acne and acanthosis nigricans. It is important to make an early diagnosis in order to prevent early and late sequel of the syndrome [3].

PCOS is associated with increased metabolic and cardio-vascular risk factors due to increased insulin resistance [4]. It is frequently associated with both

obesity and insulin resistance. Major morbidities across the lifespan can result from these metabolic and reproductive abnormalities, such as type 2 diabetes (T2D) and an ovulatory infertility [5]). Most of women with PCOS grow many small cysts on their ovaries. That is why it is called polycystic ovarian syndrome. The cyst is not harmful but leads to hormonal imbalance. It can cause problems with periods and make it difficult to get pregnant. PCOS also may cause unwanted changes in the way the woman looks. If it is not treated, overtime it can lead to serious health problems such as diabetes and heart disease [6].

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. Healthy food habits and exercise helps to combat the weight gain [7].

Awareness of PCOS symptoms and complications among the health care workers are essential for early treatment and to prevent serious complications. Nurses are uniquely positioned to raise awareness of this issue. In addition to basic tasks, they can inform women, particularly young women, about PCOS[8].

This study was conducted to evaluate the knowledge and awareness on PCOS among B.Sc Nursing students in Kalawati Nursing and Paramedical Institute (KNPI), Kasganj, Uttar Pradesh.

Objectives
1. To assess the knowledge regarding polycystic ovarian syndrome among B.Sc. Nursing students of Kalawati Nursing and Paramedical Institute.

2. To find out the effectiveness of STP regarding PCOS on Attitude score.

3. To determine the association between knowledge on PCOS among selected B.Sc. Nursing students of KNPI.

Materials and methods
A. **Research Approach:** The approach of the study is quantitative research approach.

B. **Research Design:** In this study descriptive research design is used to assess the level of knowledge regarding PCOS among selected B.Sc. Nursing students of KNPI.

C. **Research of the Study:** B.Sc. Nursing students of KNPI are selected for this study.

D. **Population:** The target population for this study is B.Sc. Nursing students of KNPI.

E. **Sample Size:** In this study sample size will be 30 B.Sc. Nursing students.

F. **Sampling Technique:** A non-probability purposive sampling technique used in this study.

A self-structured questionnaire was developed in English. The questionnaire was divided into two parts i.e., first part questions were related to Bio – demographic data and the second part questions were related to knowledge on PCOS. The total questions were 30 and the maximum score was 30 for knowledge. To interpret the level of knowledge, the score was distributed as a) 0 – 10 (Inadequate) b) 11 – 20 (Moderate) and c) 21 – 30 (Adequate).

Result:
Table 1: Frequency and percentage distribution of respondents according to demographic variables

S. No	Demographic Variable	Category	No	Percentage
1	Age	18	21	70.0
		19	08	26.66
		20	01	3.33
2	Religion	Hindu	24	80
		Muslim	4	13.3
		Christian	2	6.66
3	Dietary Pattern	Vegetarian	19	63.33
		Non-Vegetarian	11	36.66
4	Occupation of Father	Self – employee	19	63.33
		Private	08	26.66
		Government	03	10
5	Family history of PCOS	Yes	02	6.66
		No	28	93.33
6	Source of Information	News Paper	02	6.66
		Friend	06	20
		Internet	19	63.33
		Television	03	10

| 7 | Residential area | Rural | 13 | 43.33 |
| | | Urban | 17 | 56.66 |

The demographic distribution of the participants of this study is presented in Table 1. The demographic variable Age, is being categorized into 3 categories i.e., 18,19 and 20. Majority of the respondents (70%) comes under the age group 18 followed by the age group 19 (26.66%) and only 3.33% of variables are there in the age group 20. In the demographic variable Religion, majority 24 (80%) are Hindus, 4 (13.3%) are Muslims and 2 (6.665) are Christians. In the dietary Pattern of the respondents 63.33% are vegetarians and 36.66% are Non-vegetarians.

The demographic variable Occupation of Father, 19 (63.33%) comes under the category Self – employee, 8 (26.66%) comes under the category Private employee and 3 (10%) comes under the category Government employee. When coming to the variable Family history of PCOS only 2 (6.66%) lies under the category yes and 28 (93.33%) lies comes under the category no.

In the variable Source of Information it is categorized into 4 categories namely News paper 2, (6.66%), Friend 6 (20%), Internet 19 (63.33%) and Television 3 (10%). In the last variable Residential area 13 (43.4%) comes from rural area and 17 (56.66) comes for urban area.

Table 2: Analysis and interpretation of data regarding knowledge PCOS among selected B.Sc. Nursing students of KNPI

Level of Knowledge	Pre Test		Post Test	
	Frequency	Percentage	Frequency	Percentage
Inadequate	18	60	0	00
Moderate	09	30	02	6.66
Adequate	03	10	28	93.33

The level of knowledge is being presented in Table 2. When pre-test was conducted among the 30 respondents 18 (60%) have Inadequate knowledge, 09 (30%) of them have moderate knowledge and 03 (10%) have adequate knowledge. The post-test was conducted to the same respondents after one week of time. During post-test 28 (93.33%) respondents have adequate knowledge, 02 (6.66%) respondents have moderate knowledge and none of them have inadequate knowledge.

Table 3: Overall comparison of Pre-test and post-test mean knowledge level of PCOS among selected B.Sc. Nursing students of KNPI

Variables	Mean	Mean difference	SD	SD difference	't' Value	Standard error	df
Pre-test	10.67	13.86	7.26	3.64	9.3623	1.481	58
Post-test	24.53		3.62				

This table shows the average mean score of the Pre- test and Post- test knowledge. The average mean score of the knowledge is 10.67 in Pre – test and the average means score of post-test is 24.53. The difference between the Pre-test and Post-test is 13.86 score. The SD of Pre-test is 7.26 and Post-test is 3.62. The SD difference is 3.64. The 't' value is 9.3623 and df score is 58. The standard error is 1.481.

Table 4: Association between knowledge level of PCOS among selected B.Sc. Nursing students of KNPI with their selected demographic variables.

S. No	Demographic Variable	Category	No	P - Value	Chi Square	Significant/ Not significant
1	Age	18	21	0.0241	11.230	S
		19	08			
		20	01			
2	Religion	Hindu	24	0.191	6.111	NS
		Muslim	4			
		Christian	2			
3	Dietary Pattern	Vegetarian	19	0.02	7.751	S
		Non-Vegetarian	11			
4	Occupation of Father	Self – employee	19	5.021	34.835	S
		Private	08			
		Government	03			

5	Family history of PCOS	Yes	02	0.489	1.428	NS
		No	28			
6	Source of Information	News Paper	02	0.194	8.64	NS
		Friend	06			
		Internet	19			
		Television	03			
7	Residential area	Rural	13	0.152	3.755	NS
		Urban	17			

In the present study the demographic variable such as Religion, Family history of PCOS, Source of information and Residential area is Not significant and the remaining variables such as Age, dietary pattern and Occupation of Father is having significant relationship with the knowledge of PCOs.

Discussion

Polycystic ovarian syndrome is a complex endocrine disorder affecting women across all the stages of their life. Adolescent girls often present with menstrual irregularities, acne, hirsutism, and obesity which can further lead to body image disorders, low self-esteem, anxiety, and depression in them. Women with PCOs may have difficulty in spontaneous conception and often need fertility treatment. These women can also experience repeated pregnancy losses. Later in life, they are at increased risk of diabetes, hypertension, and cardiovascular disorders[9]. The study aimed to assess the knowledge of Nursing students regarding polycystic ovarian syndrome, in KNPI.

The study finding agree with the finding of Pramodh, (2020) who conducted a study about Exploration of lifestyle choices, reproductive health knowledge, and polycystic ovarian syndrome (PCOs) awareness among female Emirati University students, he found that Students displayed low reproductive health knowledge and poor awareness of PCOs. On the same line Karkar et al., (2019) who assessed the knowledge regarding polycystic ovarian syndrome among undergraduate students in selected colleges of Pune city, India, their finding classified as follows; 3% of undergraduate students are having good knowledge regarding the syndrome 73% of undergraduate students are having average knowledge and 24% of undergraduate students having poor knowledge regarding it.

This finding disagrees with Sasikala et al., (2021) who assessed the knowledge and awareness on polycystic ovarian syndrome among nursing students in a tertiary centre in South India, they found that majority of nursing students were aware of PCOs and its symptoms.

Hence this study recommends that educational programs should be designed and implemented to increase awareness on PCOS and decrease the susceptibility of PCOS among nursing students and Women population in rural areas. Secondly, there

should be knowledge enhancement program related to PCOS which may help in attitudinal change.

Conclusion

Student nurses should be educated about Polycystic Ovary Syndrome. The nurse acts as an advocate in helping the patient and family understanding the complexities of treatment decisions and manages the side effects of drugs and complications associated with PCOS. A well-informed nurse can empower the patients with knowledge of the disease and treatment. It can have more positive influence on outcome of disease

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