

# A Study to Assess the Level of Knowledge on Polycystic Ovarian Syndrome among Nursing Students at Selected Nursing College, Salem

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## ABSTRACT

About one in five women has polycystic ovaries, and approximately one in 10 has PCOS to some degree. Polycystic ovary syndrome (PCOS) is a condition in which women typically have a number of small cysts around the edge of their ovaries. The aim of the study is to assess the level of knowledge on polycystic ovarian syndrome among nursing students. The Descriptive research design was used. Selected 44 girls of nursing students through non-probability convenient sampling technique. The tool used was structured questionnaire consists of demographic variables, tool for diagnosis of PCOS and structured questionnaire on polycystic ovarian syndrome. The data were analyzed by using descriptive and inferential statistics. Majority of the nursing students 37(84.09%) had moderately adequate knowledge. The overall mean score was  $14.2 \pm 3.173$ ; the mean percentage was 46.6%. There was no significant association found between the level of knowledge on polycystic ovarian syndrome among nursing students with their demographic variables. As a nurse midwife, we have to promote knowledge about signs & symptoms of PCOS and thus helping the Nursing students to have future in peaceful.

**Keywords:** Polycystic ovary syndrome, Knowledge, Nursing students

## INTRODUCTION

Typically, polycystic ovarian syndrome first appears in adolescence, normally around the state of menstruation. Occasionally, some women do not develop polycystic ovary syndrome symptoms until their early to mid-20s. One of the most common symptoms of polycystic ovarian syndrome is irregular periods. Polycystic ovarian syndrome (PCOs) becomes symptomatic during adolescence and affects at least 5% of reproductive-age women. Polycystic ovarian syndrome is a heterogeneous syndrome of unexplained chronic hyperandrogenism and oligo-anovulation, with a polycystic ovary being an alternative diagnostic criterion.<sup>1</sup>

The prevalence of Polycystic ovarian syndrome is increasing rapidly but the females doesn't have adequate knowledge about this syndrome. The prevalence of overweight and obese (BMI 30kg/m<sup>2</sup>) is significantly contributing to the overall burden of Polycystic ovarian syndrome worldwide. The Polycystic ovarian syndrome is reported to be a growing problem with adolescent girls. Adolescent may experience the full range of symptoms irregular (or) complete absent of menstruation. Research has proved that Polycystic ovarian syndrome predisposes the women including adolescent girls to additional health problems. Polycystic ovarian syndrome accounts for 90 of women with oligomenorrhoea 30 of women with amenorrhoea and over 70 of women with anovulation.<sup>2</sup>

Conducted a study to assess prevalence and knowledge of PCOS among female science students of different public universities at Quetta, Pakistan. A mixed methodology approach was conducted in different public universities of Quetta which focuses on questionnaire based on assessment as well as providing education. The data from 451 female students of age

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range between 18-26 years was collected by using stratified convenient sampling technique from January to September 2016. The finding of the study revealed that 374(72.5%) respondents were not aware of PCOS and get knowledge through brochure. while 407(90.2%) subjects were having adequate knowledge about PCOS after educational intervention. It was obtained in the study that 79(17.5%) participants were suspected with PCOS and 16(3.5%) were diagnosed with PCOS on the basis of signs and symptoms and 25(5.5%) were already diagnosed with PCOS. It was also obtained that 35(7.8%) participants were overweight and 13(2.9%) respondents were obese.<sup>3</sup>

A cross - sectional analytical study was conducted in Qassim University Clinic, in the year of 2007 -2009. They concluded that obesity plays an important role in the genesis and maintenance of polycystic ovarian disease. Poly cystic ovarian disease is the leading cause of anovulatory infertility in females and affects 1 in 10 women of reproductive age. Poly cystic ovarian disease is strongly associated with obesity.<sup>4</sup>

Conducted a prospective longitudinal study concluded that there is a significant risk mood disorders in women with polycystic ovarian syndrome. The persistent high rate of depression and other mood disorders are presents in young women with Poly cystic ovarian disease.<sup>5</sup>

Conducted a cross - sectional, regarding quality of life in women with polycystic ovarian syndrome. The results of this study indicate that women with polycystic ovarian syndrome have the greatest concern in the area of weight, followed by menstrual problems and infertility. These concerns are directly reflected in their objective life experiences. Women with polycystic ovarian syndrome clearly need education and support regarding the effect of their quality of life.<sup>6</sup>

**Statement of the Problem:** A study to assess the level of knowledge on polycystic ovarian syndrome among nursing students at selected nursing college, Salem.

### OBJECTIVES

- To assess the prevalence of polycystic ovarian syndrome among nursing students.
- To assess the level of knowledge on polycystic ovarian syndrome among nursing students.
- To associate the level of knowledge on Polycystic ovarian syndrome with their demographic variables.

### Hypothesis

**H<sub>1</sub>:** There is a significant association between the level of knowledge of Polycysti ovarian syndrome among nursing students with their demographic variables at  $p \leq 0.05$  level

**Conceptual Framework:** The conceptual framework of this study is based on Pender's health promotion model (2002). Health promotion is directed at increasing a client level of well being. This model focuses on the following three areas Individual characteristics and experience, Behavior specific knowledge and effect and Behavior outcomes.

### MATERIALS AND METHOD

The non-experimental descriptive research design was used for this study. The study was conducted in Sri Gokulam College of Nursing, Salem. The non probability convenient sampling technique was adopted and selected 44 girls from IV year B.Sc(N) and III year DGNM students as a study samples. The tool consists of three sections. It Section I consists of 10 demographic variables, Section II consists of Modified Clinical tool for diagnosing the prevalence of polycystic ovarian syndrome & Section III consists of Structured questionnaire to assess the knowledge of polycystic ovarian syndrome. Data analysis was done by using both descriptive and inferential statistics.

### RESULT AND DISCUSSION

Age wise distribution shows that highest percentage 20(45%) of students were in the age group between 20 years and most of the students 38(86.3%) were Hindus, only 1(2.2%) belongs to Muslim. Course of study wise distribution shows that 34(77.2%) were IV year B.Sc(N) students and 10(22.7) were III year DGNM students. Dietary pattern wise distribution shows that most of student 37(84.0%) were non-vegetarian, and majority of nursing students 29(65.9%) consume weekly once. According to consuming of junk food 25(56.8%) of them like junk foods and majority of the nursing students 30(68.1%) drink only 500-1000ml of water per day. According to regularity of menstrual cycle majority of nursing students 36(81.8%) have regular menstrual cycle and 27(61.3%) of the nursing students having ideal weight and none of them were obese.

**Distribution of nursing students according to the prevalence of polycystic ovarian syndrome**

**Table 1: Frequency and Percentage wise distribution of nursing students according to the prevalence of polycystic ovarian syndrome**

n = 44

Scores	Frequency	Percentage
Mo More than and equal to 2, C consistent with diagnosis of Poly cystic ovarian Syndrome.	3	6.8
M More than 2, not consistent diagnosis of Poly cystic ovarian syndrome	41	93.18

Distribution of nursing students according to their prevalence of poly cystic ovarian syndrome 3(6.8%) were consistent with diagnosis of Polycystic ovarian syndrome and 41(93.18) were not consistent with diagnosis of Polycystic ovarian syndrome.

**Distribution of nursing students according to their level of knowledge on polycystic ovarian syndrome**

**Table 2: Frequency and Percentage wise distribution of nursing students according to their level of knowledge on polycystic ovarian syndrome**

n = 44

Level of knowledge	Frequency	Percentage
Adequate knowledge	1	2.27
Mo Moderately adequate knowledge	37	84.09
In Inadequate knowledge	6	13.63

Distribution of nursing students according to their level of knowledge shows that 1(2.27%) of students had adequate knowledge, 37(84.09%) of students had moderately adequate knowledge and only 6(13.63%) of students had inadequate knowledge on poly cystic syndrome.

**Mean, standard deviation and mean percentage of knowledge scores among nursing students**

**Table 3: Distribution of Mean, standard deviation and mean percentage level of knowledge of poly cystic ovarian syndrome**

n = 44

Variable	Maximum score	Mean	S.D	Mean %
Knowledge	30	14.02	3.173	46.6

Distribution of Mean, Standard Deviation and Mean percentage on knowledge scores on poly cystic ovarian syndrome shows that the overall mean score was 14.2±3.173; the mean percentage was 46.6%. It shows that nursing students had moderately adequate knowledge on poly cystic ovarian syndrome.

**Association between knowledge scores of poly cystic ovarian syndrome with their demographic variables**

**H<sub>1</sub>:** There will be a significant association between the level of knowledge poly cystic ovarian syndrome with their selected demographic variables at P≤0.05 level.

**Table 4: Association between the knowledge scores with their demographic variables among nursing students**

n = 44

Sl. No.	Demographical variables	Df	Table Value	χ <sup>2</sup>
1.	Ag Age in years	3	7.82	2.893
2	Rel Religion	3	7.82	2.359
3.	Co Course of study	1	3.84	0.925

Conted...

4.	Die Dietary pattern	1	3.84	0.722
5.	H Habit of consuming non-veg	2	5.99	1.031
6.	Do Do you like junk food	1	3.84	1.212
7.	Am Amount of water intake per day	2	5.99	1.168
8.	Re Regularity of menstrual cycle	1	3.84	1.485
9.	Me Menstruation disorder	1	3.84	0.589
10.	So Source of information	5	11.07	2.099
11.	BMI	3	7.82	0.981

\* Not Significant at  $P < 0.05$  level.

No significant association was found between the level of knowledge scores on poly cystic ovarian syndrome among nursing students with their demographic variables like age of the student, religion, course of study, dietary pattern, habit of consuming non veg, do you like junk food, amount of water intake per day, regularity of menstrual cycle, menstruation disorder, source of information and source of previous knowledge at  $P < 0.05$  level. Hence the research hypothesis was rejected.

### CONCLUSION

The study was done to assess the level of knowledge on poly cystic ovarian syndrome among nursing students at selected Nursing College, Salem. The findings revealed that 84.09% of the nursing students had moderately adequate knowledge on poly cystic ovarian syndrome.

### IMPLICATIONS

#### Nursing Research:

- Findings of this study will act as catalyst to carry out more extensive research on the largest samples in different settings.
- Nurses have expanded and extended role of promotive, preventive, curative and rehabilitative services of individual, family and community level.
- Nurses can provide centralized approach regarding obesity and Poly cystic ovarian syndrome by taking action to impart knowledge to the community people.

#### Nursing Education:

- Nursing curriculum provide clinical experience regarding conduction of VAT programme about

obesity and Poly cystic ovarian syndrome in various settings.

- Various in- service education and appropriate teaching materials need to be prepared and made available to the students and staffs regarding Polycystic ovarian syndrome.
- In order to educate the patients, it is essential that nurses should be competent and should have sound knowledge to improve the level of understanding on obesity and Polycystic ovarian syndrome and an improved level of understanding can be reflected to public through education.

#### Nursing Administration:

- Nurses have to play multidimensional role and their skills have to be combined with the specialised knowledge to ensure prevention of complications of obesity and Polycystic ovarian syndrome.
- The nurse should participate in public awareness programs, through mass media and administration should take initiatives to organize educational program for health personnel regarding obesity and Polycystic ovarian syndrome.

#### Nursing Services:

- Nurses play an important role in promotive, curative and preventive aspects of health care system. The nurses should provide teaching programme for obesity and Polycystic ovarian syndrome in hospital and community.
- The nurses working in hospitals should themselves provide health education to clients; they should do teaching programme rather than incidental teaching.

## RECOMMENDATIONS

- The study needs to replicate on a large sample to validate and generalize its findings.
- A similar study can be conducted in community health centres to assess the knowledge regarding obesity and Poly cystic ovarian syndrome.
- A longitudinal study can be conducted to assess the correlation between obese and overweight adolescent girls with the symptoms of polycystic ovarian syndrome.
- A similar study can be conducted to assess the knowledge regarding obesity and Poly cystic ovarian syndrome among staff nurses, other college girls, reproductive age bearing women, and all other females who are having obesity and hormonal imbalances
- Learning modules with pictorial should be given to public regarding obesity and Poly cystic ovarian syndrome.

**Conflict of Interest:** Nil

**Source of Support:** Self Funded

**Ethical Clearance:** Obtained from Institutional ethical board.

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