

A Study to Assess The Knowledge on Effectiveness of an Information Booklet Regarding Lifestyle Modifications in Polycystic Ovarian Disease Among 4th Year BSc Nursing Students in Selected Nursing Colleges, Bangalore

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Abstract:

Nurses and nursing students are in a critical position to provide comprehensive care to girls and women afflicted with the syndrome. Depending upon where these young females are encountered (in-patient hospital unit, school nurse's office, or outpatient clinic), the nurse's role and her approaches to care may be different. Regardless of the setting or role, essential elements of nursing practice should always include education and emotional support. Essential elements of nursing practice should be included in the nursing education. So, upgrading the knowledge regarding PCOD to nursing students will enhance the girls and women to modify their lifestyle and reduce the risk. Lack of knowledge and lifestyle changes are considered to be the major factor leading to this phenomenon. Evaluative approach was selected; one group pre-test and post-test design was adopted. Samples were 4th year B.Sc Nursing students and size was 60 and was selected by purposive sampling technique. The study revealed that the mean post test score was 92.23% which was significantly higher than the pre-test score of 14.5%. The difference in the mean enhancement score was 77.73 % as observed and further paired 't' test value of the pre-test and post-test knowledge of the sample was found to be significant at 0.05 level ($t=24.14, p<0.05$). The study showed that pre-test knowledge level was deficient and there was increase in the knowledge level after informational booklet regarding lifestyle modifications in PCOD. The study concluded that informational booklet was effective in increasing the knowledge level of 4th year B.Sc nursing students regarding lifestyle modifications in PCOD.

KEYWORDS: Polycystic ovarian disease Syndrome, Polycystic ovarian disease, World health organization, Body mass index

INTRODUCTION

Polycystic ovarian disease was earlier called Stein Leventhal syndrome. In 1935 Dr. Stein and Leventhal described a syndrome in which women suffered irregular and

usually rare periods, hirsutism (unwanted hair growth), and varying degrees of infertility. Polycystic ovarian disease is a typical medical condition among teenage girls and young adolescents. It affects 5% to 10% of adolescent's girls in reproductive years.

Adolescent period is a unique period where there is a change from childhood to adulthood, a time of physiological, psychological, social and emotional adaptation¹.

Polycystic ovarian syndrome is a form in which woman has an imbalance of female sex hormones. PCOD usually starts during adolescence, but may not be detected until women are in their late 20s or 30s as it takes a long time for symptoms to develop, and those symptoms vary widely from one woman to the next. Polycystic ovarian disease (PCOD) is one of the most common problems that may affect a woman's fertility. PCOD is a chronic hyper androgenic state which has many significant short-term and long-term implications for patients such as oligomenorrhea, amenorrhea, infertility, diabetes mellitus, cardiovascular disease, increased risk of endometrial cancer and excessive body hair.

A healthy lifestyle is one of the most important aspects of managing polycystic ovarian disease effectively. A healthy diet ensures that the adolescent's girls and women are getting an adequate intake of nutrients, vitamins and minerals. Healthy diet and avoiding junk foods and regular exercise reduce the severity of polycystic ovarian symptoms. Prevention is better than cure.²

Polycystic ovarian disease Syndrome (PCOD/PCOS) is a complex condition in which a woman's ovaries are generally bigger than average. Polycystic means the ovaries have many cysts or follicles that rarely grow to maturity or produce eggs capable of being fertilized. PCOD is relatively common, especially in infertile women. PCOD occurs when an endocrine imbalance results in high levels of estrogen, testosterone, and luteinizing hormone (LH) and decrease secretion of follicle stimulating hormone (FSH). This syndrome is associated with a variety of problems in the hypothalamic-pituitary-ovarian axis and with androgen-producing tumours. PCOD is a common condition present in 12–21% of women of reproductive age. Up to 70% of women with PCOD remain undiagnosed.

Women with PCOS are more likely to suffer from depression, anxiety, poor self-esteem, alter the coping abilities, strain relationships, decrease quality of life, disordered eating and psychosexual dysfunction. The underlying etiology of PCOS is unknown, but strong evidence supports the possibility of a genetic component in disease development. Familial clustering of the disorder and noted inheritance of hyper androgenaemia and hyper insulinemia (common findings in PCOS) strongly indicate a possible hereditary influence. Environmental risk factors such as obesity may also play a role; supporting the hypothesis that genetics and environment may be interconnected PCOS has several serious complications. Estrogen levels are elevated, increasing risk of endometrial hyperplasia and, eventually, endometrial cancer. Androgen levels are often elevated, increasing the risk of metabolic syndrome and causing hirsutism. Hyperinsulinemia due to insulin resistance may be present and may contribute to increased ovarian production of androgens. Over the long term, androgen excess increases the risk of cardiovascular disorders, including hypertension.³

Polycystic ovarian disease can be prevented in adolescents by early diagnosis and treatment which helps in preventing complications, Lifestyle modification, including weight reduction, nutritional plans, and exercise is beneficial in managing polycystic ovarian disease and is often considered the first line of therapy for the treatment and management of polycystic ovarian disease. Oral contraceptives pills are often employed to control polycystic ovarian disease symptoms such as acne, hirsutism and irregular menstrual cycle. PCOS Health stated that the management of PCOS usually requires lifestyle changes including following a healthy eating plan and increasing physical activity which help with weight loss and improving insulin sensitivity.⁴

Polycystic ovarian disease (PCOD) or also known as functional ovarian hyperandrogenism, ovarian hyperthecosis and

sclerocystic ovary syndrome have multiple small cysts in their ovaries. These cysts occur when the regular changes of a normal menstrual cycle are interrupted. The ovary is inflated and produces a large amount of androgen and estrogenic hormones. This excess, along with the absence of ovulation, may cause sterility in women. Polycystic ovarian syndrome is an endocrine disorder that affects approximately 5% of young women. The most common hormonal disorder may occur among women in the reproductive age between 13-40 years and leading major causes of infertility. Polycystic ovarian syndrome in gynaecology for about 75% of an ovulatory, infertility. The risk of polycystic ovarian syndrome was found to be 40% in a women population of reproductive age. Women with polycystic ovarian syndrome have a higher incidence of ovarian cancer and are about 2.5 times as likely as healthy women to develop ovarian cancer, and the persistent dysfunctional bleeding that affects some women with polycystic ovarian syndrome can lead to anemia. "PREVENTION IS BETTER THAN CURE" So the early detection and treatment of polycystic ovarian disease could prevent many complications later in adulthood.⁵

Nurses and nursing students are in a critical position to provide comprehensive care to girls and women afflicted with the syndrome. Depending upon where these young females are encountered (in-patient hospital unit, school nurse's office, or outpatient clinic), the nurse's role and her approaches to care may be different. Regardless of the setting or role, essential elements of nursing practice should always include education and emotional support.⁴ Essential elements of nursing practice should be included in the nursing education. So, upgrading the knowledge regarding PCOD to nursing students will enhance the girls and women to modify their lifestyle and reduce the risk. 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 women 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 and Students were considered to be the future pillars who take the responsibilities to take our country to the next phase they should be in better way.

OBJECTIVES

- ❖ To assess the knowledge regarding lifestyle modifications in PCOD among 4th year B.Sc Nursing students.
- ❖ To evaluate the effectiveness of an information booklet on knowledge regarding lifestyle modifications in PCOD among 4th year B.Sc Nursing students.
- ❖ To find the association between post-test knowledge regarding lifestyle modifications in PCOD with selected demographic variables.

HYPOTHESIS

- **H1:** There is a significant difference in the level of knowledge regarding lifestyle modifications in polycystic ovarian disease between pre-test and post-test scores.
- **H2:** There is a significant association between post-test level of knowledge regarding lifestyle modifications in polycystic ovarian disease and selected demographic variables among 4th year BSc Nursing students.

ASSUMPTIONS

- Nursing students will have some knowledge about lifestyle modifications in polycystic ovarian disease.
- Information Booklet administration will help in improving the knowledge of nursing students regarding lifestyle modifications in polycystic ovarian disease.
- Gain in knowledge regarding lifestyle modifications reduces the risk of getting polycystic ovarian disease.

MATERIALS AND METHODS

Section 1: Demographic variables:

Demographic variables with 10 items on age, menstrual cycle, menstrual complaints, history of polycystic ovarian disease, source of information, knowledge regarding polycystic ovarian disease, knowledge regarding lifestyle modifications on polycystic ovarian disease and respondents were instructed to select the most appropriate answer.

Section 2: Structured Knowledge questionnaire

Structured knowledge questionnaire consists of 30 on polycystic ovarian disease. The structured knowledge questionnaire was made under the following headings: General information regarding polycystic ovarian disease, etiology, signs and symptoms, diagnosis, management, complications of polycystic ovarian disease and lifestyle modifications in polycystic ovarian disease.

Scoring procedure

The structured knowledge questionnaire 30 items and a total aggregate score of 30. Each question having four options in which patients can choose the correct option. Each correct option is scored as 1 and wrong is scored as 0.

Total score is divided as:

Inadequate knowledge	<50%(<15)
Moderately adequate knowledge	50-75%(15-22)
Adequate knowledge	>75% (>22)

The research setting in this study was SJES college of nursing, Bangalore. In the study target population were 4th year BSc Nursing students in selected nursing colleges, Bangalore. Purposive sampling technique was used to select 60 4th year BSc Nursing students.

RESULTS

Pre-test and Post-test Mean knowledge scores of respondents on lifestyle modifications in PCOD

85% of the respondents had inadequate knowledge, 15% had moderate knowledge and nobody had adequate knowledge in pre-test. In the post test, 98.33% had adequate knowledge, 1.67% had moderate knowledge and none of them had inadequate knowledge.

Comparison of Pre-test and Post-test knowledge mean scores

The finding revealed that the mean post test score was 92.23% which was significantly higher than the pre-test score of 14.5%. The difference in the mean enhancement score was 77.73 % as observed. Further paired 't' test value of the pre-test and post-test knowledge of the sample was found to be significant at 0.05 level ($t=24.14$, $p<0.05$). However, the findings revealed that an information booklet on knowledge regarding lifestyle modifications in PCOD was an effective strategy by the statistical results. It means there was significant difference between pre-test and post-test knowledge level of 4th year B.Sc nursing students regarding lifestyle modifications in PCOD.

Association between Demographic variables and Post-Test Knowledge level of respondents

Association of demographic variables with the knowledge level of 4th year B.Sc nursing students was done by using chi square test. The post test knowledge level on lifestyle modifications in PCOD is significant at 0.05 level to certain demographic variables like duration of menstrual cycle, type of diet and history of PCOD.

DISCUSSION

The hypothesis 1 (H1) states that there is a significant difference in level of knowledge regarding lifestyle modification in polycystic ovarian disease between pre test and post test scores (the mean post test score was 92.23%

which was significantly higher than the pre-test score of 14.5% and the mean enhancement score of 77.73 %) was accepted.

Hypothesis (H2) was accepted for these demographic variables and rejected for other variables like age, religion, Age Of Menarche, Menstrual Complaints, Frequency Of Menstrual Cycle, Habit Of Doing Exercises, Source Of Information as they were non-significant at 0.05% level.

CONCLUSION

The study showed that pre-test knowledge level was deficient and there was increase in the knowledge level after informational booklet regarding lifestyle modifications in PCOD. The study concluded that informational booklet was effective in increasing the knowledge level of 4th year B.Sc nursing students regarding lifestyle modifications in PCOD.

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