

A Study To Assess The Knowledge Regarding Seed Cycling As A Dietary Approach For PCOS Among First Year Nursing Students At Selected Nursing College, Villupuram. With A View To Develop Information Booklet.

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ABSTRACT

Polycystic Ovary Syndrome (PCOS) affects 5-20% of reproductive-age women, with seed cycling emerging as a dietary hormone-balancing approach. Yet, knowledge gaps persist among nursing students, future health educators. A descriptive study with 100 first-year students at E.S. College of Nursing, Villupuram, used a structured questionnaire. Knowledge was scored as inadequate (<50%), moderate (50-75%), adequate (>75%). Data analyzed via frequency, percentage, and chi-square ($p < 0.05$). All were 17-21 years (100%); 67% had moderate knowledge, 25% inadequate, 8% adequate. Significant associations existed with type of residence and history of PCOS ($p < 0.05$). Moderate knowledge prevails, influenced by demographics. The booklet addresses gaps for curriculum integration.

KEYWORDS: Seed cycling, PCOS, nursing students, knowledge assessment, dietary approach.

INTRODUCTION

World Health Organization (WHO) and other global studies estimate that PCOS affects **5-10%** of women of reproductive age worldwide. Some more recent studies suggest this range could be even wider, from **6% to 21%**, depending on the diagnostic criteria.

A global burden of disease study from 2021 reported a worldwide prevalence of **65.77 million** cases of PCOS, with an incidence of **1.175 million** cases. This shows a significant increase from 1990, indicating a rising trend in the condition.

Several studies and reports, including some referenced by institutions like the **Indian Council of Medical Research (ICMR)** and the **National Institute of Nutrition (NIN)**, show a wide range of prevalence rates in India, from **3.7% to 22.5%**. This wide variation is attributed to different diagnostic criteria and the diverse populations studied.

A study conducted as part of the ICMR's PCOS National Task Force found a high proportion of obesity among women in South India, with rates as high as **66%** using revised Indian BMI guidelines. This is significant because obesity is a major risk factor for PCOS.

Research in India, including a study in Tamil Nadu, has found that PCOS is a common disorder among college-going students and adolescents, with prevalence rates ranging from **9% to 22.5%** in certain regions. This is particularly relevant to your study with nursing students.

NEED OF THE STUDY:

Polycystic Ovary Syndrome (PCOS) is a common hormonal disorder that affects women around the world. While many people with PCOS use standard treatments like birth control pills and metformin, there is growing interest in natural approaches such as seed cycling. Seed cycling involves eating specific seeds at different times of the menstrual cycle to help balance hormones and manage PCOS symptoms. Even though more people are talking about seed cycling, many healthcare professionals including nursing students don't know much about it. Nurses play an important role in teaching and supporting patients, so it's essential they are aware of all possible treatment options. Unfortunately, many nursing courses don't discuss these newer dietary strategies, leaving a gap in knowledge. This study will find out how much nursing students at a college in Villupuram know about seed cycling. By identifying what students don't know, we can show where education needs to improve. The findings will also help create an easy-to-understand booklet, giving future nurses reliable information so they can better help women with PCOS and improve health in the community.

OBJECTIVES:

- To assess the existing knowledge regarding seed cycling as a dietary approach for PCOS among first-year nursing students at a selected nursing college in Villupuram.
- To determine the association between the knowledge regarding seed cycling as a dietary approach, as measured by the scores of first-year nursing students, and their demographic variables.
- To develop an information booklet on seed cycling for PCOS to improve the knowledge of first-year nursing students.

MATERIALS & METHODS:

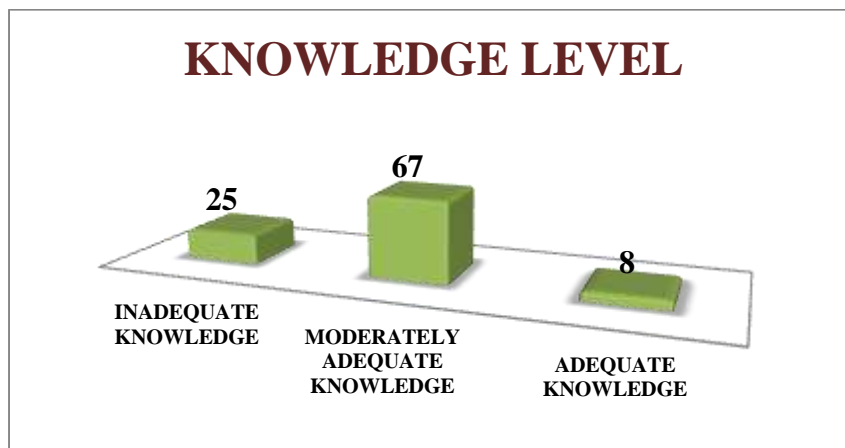
- The study employed a quantitative research approach with a descriptive design. It was conducted at E.S College of Nursing, Villupuram, focusing on first-year nursing students as the population. The target population included all first-year nursing students in Villupuram, with the accessible population consisting of those enrolled at E.S College of Nursing.
- A sample of 100 first-year nursing students was selected using random sampling. Inclusion criteria were students willing to participate and available during data collection, while students who were ill during the study were excluded.
- Data was collected using a self-administered structured questionnaire with multiple-choice questions assessing knowledge of seed cycling for PCOS. The questionnaire was divided into two sections: Section A covered demographic variables such as age, religion, income, family type, residence, food habits, previous information sources, and PCOS history. Section B assessed knowledge of PCOS, menstruation, and seed cycling, with scores categorized as inadequate (1-9), moderately adequate (10-18), and adequate knowledge (19-27).
- The researcher obtained formal permission from the principal and informed consent from participants, ensuring confidentiality. Data analysis included descriptive statistics (frequency and percentage) for demographics and knowledge levels, and inferential statistics (Chi-square test) to examine associations between knowledge and demographic variables.

RESULT

SECTION –I FREQUENCY AND PERCENTAGE DISTRIBUTION OF SELECTED DEMOGRAPHIC VARIABLES

- **AGE IN YEARS**
 - Among 100 samples, 17-21 belongs to (100%), 22-25 belongs to (0%), 26-29 belongs to (0%), 29 & above (0%).
- **RELIGION**
 - Among 100 samples, Hindu belongs to (75%), Muslim belongs to (2%), Christian belongs to (23%), and others belong to (2%).
- **FAMILY INCOME**
 - Among 100 samples, Nuclear belongs to (79%), Join belongs to (19%), Extended belongs to (2%) and others belong to (0%).
- **TYPE OF RESIDENCE**
 - Among 100 samples, Urban belongs to (26%), Semi urban belongs to (17%), Rural belongs to (55%), others belong to (2%).
- **FOOD HABITS**
 - Among 100 samples, Vegetarian belongs to (10%), Non Vegetarian belongs to (86%), Ovo Vegetarian belongs to (2%), and Eggetarian belongs to (2%).
- **PREVIOUS SOURCE OF INFORMATION**
 - Among 100 samples, Academics belong to (12%), Social media belongs to (23%), a Healthcare professional belongs to (25%), Friends/family belongs to (24%), online articles belong to (4%) and others belong to (12%).
- **DO YOU HAVE A HISTORY OF PCOS**
 - Among 100 samples, (15%) responded to Yes, (85%) responded to No.

SECTION II Assessment of level of knowledge regarding seed cycling a dietary approach among first year nursing students



Knowledge level of Seed cycling as a dietary approach for PCOS

SECTION III - Association between levels of knowledge with their selected socio demographic variables.

- The Study Revealed that there was statically significant association at level of $p < 0.05$ between the knowledge of the first year nursing students on seed cycling a dietary approach for PCOS significant association level of knowledge on selected demographic variables such as type of residence, history of PCOS.

DISCUSSION

This study reveals predominantly moderate knowledge (67%) about seed cycling for PCOS among first-year nursing students, with only 8% demonstrating adequate understanding. Significant demographic

associations indicate lower knowledge among rural and low-income groups, likely due to limited healthcare access. Personal PCOS history strongly correlated with better knowledge ($\chi^2=29.37$, $p<0.05$), suggesting self-motivated learning. These findings align with similar studies showing 60-70% moderate PCOS nutrition knowledge among Indian nursing students. The developed information booklet addresses the 25% with inadequate knowledge, fulfilling the study's third objective. Limitations include self-reported data and single-college sampling, warranting multi-center validation for broader applicability.

CONCLUSION

This research reveals predominantly moderate knowledge of seed cycling among first-year nursing students, with significant socio-demographic influences. The findings highlight critical educational gaps in PCOS nutritional management. The developed information booklet provides a practical resource to enhance awareness and integrate evidence-based dietary strategies into nursing curricula, ultimately strengthening future nurses' capacity for holistic reproductive health care and informed patient counseling.

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