Chapter 9

An Experimental Study To Assess The Effectiveness Of Video Assisting Teaching Programme On Knowledge Regarding Pcod Among Adolescent's Girls (17-22 Year) On 3rd Semester Nursing Students In Selected College Of Nursing Bilaspur [C.G]

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Abstract

Polycystic ovarian disease (PCOD) is the most common endocrine pathology in females of reproductive worldwide. Stein and Leventhal initially described it in 1935. The prevalence of PCOD ranges between 5% and 15%. The study was conducted in C.G Institute of Nursing, Bilaspur [C.G]. Informed consent was obtained, confidentiality of information was assured. The data was collected, arranged, tabulated and analyzed. A Quantitative research approach and experimental research design was adopted in the study and convenient sampling was used to select the sample. After reviewing the research and non-research material and seeking the opinion of experts, a preliminary list of 30 questions was prepared. The first part of the tool consists of Socio demographic variable. The second part of the tool consist of self-structured questionnaire to assess the effectiveness of video-assisted teaching programme on PCOD. The major findings of the study are: there is a significant association between pre-test knowledge level regarding PCOD with family history of PCOD and Habitat as the calculated chi square value (4.56,6.71) was greater than the table value (3.84,5.99) at df (1,2) respectively.

1. Introduction

1.1 Background of the study

"Adolescent Health is a smart Investment: not only will it improve health and survival in short term, it will bring benefits for future generations."

- Valentina Baltag, WHO

Life shrinks or expands in proportion to one's courage. The best protection of Any women is courage, because she has the power to create, and manifest the Glory of God, though she possess within herself, which is expressed through when she becomes a mother.

Adolescence is a period of transition from childhood to adulthood, a time of physiological, psychological, social and emotional adaptation. Adolescence is one of the most fascinating and complex transition in the life span: a time of accelerated Growth and change.

Gynecological diseases are fairly common but most of the women ignore the Symptoms or they are unaware, until the problem really worsens. Now a days, one of the problems faced by adolescent girls are POLYCYSTIC OVARIAN DISEASE.

Polycystic ovarian Disease is an endocrine disorder which affect the Adolescent girls. Polycystic ovarian Disease is a condition in which the woman has imbalance of male 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 teenage and young women. It affects 5% to 10% of women in their reproductive year.

Polycystic ovarian Disease (PCOD) gets its name because of clusters of Small, pearl size cyst in ovaries. These cysts are fluid filled bubbles called follicles. That contain eggs that have not yet been released because of hormonal imbalance. A Major cause of polycystic ovarian syndrome is a genetic disorder. The other causes Are family history and abnormal gonadotropin secretion duet one negative feedback of Hypothalamus.

PCOD involves primary defects in the hypothalamic pituitary axis, insulin Action and ovarian function. PCOD has been linked to insulin resistance and obesity. Insulin help estrogen regulate the ovarian function. The ovaries respond to excess insulin by producing and estrogens, which can lead to an ovulation. Follicular maturation arrest is A hallmark sign that an ovarian abnormality exists.

A key sign of PCOD is irregular or missed periods because the hormonal Effects on the ovaries can cause an ovulation. Enlarged ovaries with numerous small Cysts, irregular menstrual cycles, hirsutism, alopecia, acne, acanthuses, Nigerians, and Skin tags are the symptoms of PCOD. All though the signs symptoms are varied, the three Most common fact or associated with PCOD include ovulation irregularities, Increased and estrogen levels, and cystic ovaries. Majority of the women have problems with ovulation and elevated androgen levels. Moreover, hirsutism, acne, and alopecia Are directly associated with elevated androgen levels, and the prevalence of polycystic Ovaries.

If PCOD is suspected, a complete medical history, physical examination, blood Tests, and a pelvic ultrasound should be performed. A medical history and physical Examination provide the physician about unexplained weight gain, menstrual cycle Abnormalities, male-pattern hair growth, skin changes, and elevated blood pressure (BP). During the assessment period, other potential causes associated with Reproductive, endocrine, and metabolic dysfunction could be excluded. Physicians Should rule out adrenal hyperplasia, Cushing syndrome, and hyperprolactinemia Before a PCOD diagnosis is confirmed.

Few treatment approaches improve all aspects of the syndrome. The patient's Desire for fertility prevent her from seeking treatment despite the presence of Symptoms. Treatment goals should include correcting an ovulation, inhibiting the Action of androgens on target issues, and reducing insulin resistance. A healthy life style is one of the most important aspects so managing PCOD Successfully. A healthy diet will ensure that the adolescent girls are getting an adequate intake of nutrients, vitamins and minerals. Healthy diet, avoid junk foods and regular exercise reduce this variety of PCOD. Weight reduction for obese patients with PCOD is beneficial in many ways. Weight loss helps to decrease androgen, Luteinizing hormone (LH), and insulin levels. It also help store and regulate ovulation, Thereby improving the potential for pregnancy.

The study aimed at improving the Knowledge level of Adolescent Girls with Polycystic Ovarian Disease in Nursing College of Bilaspur District (C.G), knowing the impact of PCOD on adolescent health and to create awareness on; EARLY IDENTIFICATION AND MANAGEMENT OF PCOD.

2. Methodology

2.1 Study Area

The study was conducted in the C.G. Institute of Nursing, Bilaspur (C.G).

2.2 Study Design

In the present study, Experimental research design is used.

2.3 Study Population

In this study population includes all adolescent who are coming to C.G Institute of Nursing, Bilaspur District (C.G).

2.4 A. Inclusion Criteria

In the present study, the inclusion criteria include those Adolescent girls who are: -

1. Between 17-22 years of age.
2. Willing to participate.
3. Knows to read and write Hindi and English.
4. Present on the day of data collection.

2.4 B. Exclusion Criteria

Exclusion criteria include those Adolescent girls who are:-

1. Not willing to participate.
2. Not present on the day of Data collection.

Suffering from chronic diseases.

2.5 Sampling Technique

For present study, convenient sampling technique is used. It is a non-probability sampling technique where participants are selected based on their ease of access and availability to the researcher, rather than random selection. Questionnaire were distributed to the Adolescent girls selected from sampling technique. Consenting adolescent girls which fits into the inclusion criteria will be taken as a part of participants.

2.6 Study Instrument

Questionnaire:

The questions will cover the following sections:

SECTION A: - Socio-demographic variables

SECTION B: - Questionnaire on awareness of early identification and management of PCOD

2.7 Pretesting

To ensure the Reliability, the Questionnaire were pre-tested among consenting adolescents of AARBEE college of nursing, Bilaspur C.G. The questionnaire will be administered to 10% of sample size 40 which is 4 participants. The data collected was analyzed and used to design the standardized structured questionnaire.

To check the effectiveness of Video assisting teaching programme on knowledge regarding PCOD, the spilt half method was used to test the reliability of the tool. The test was first divide into two equivalent halves and correlation was found by Karl Pearson's coefficient formula. The reliability of the tool was 0.99. So, the tool was found to be highly reliable for data collection.

2.8 Ethical consideration

For the present study the investigator took into consideration the following ethical issues:

- The research problem and objectives were approved by the research committee.
- Due permission from authorities was sought and obtained.
- Right of the participant was ensured.
- Confidentiality and anonymity of the participants was ensured.

2.9 Limitations

The data collection was only limited to

- forty adolescent girls who are studying in C.G Institute of nursing, Bilaspur.
- Willing to participate
- Present on the day of data collection
- Age between 17 to 24 years
- Able to read and write Hindi & English

3. Results

Table 1: Distribution of study subjects to assess pre-test and post-test knowledge score regarding PCOD

Test	Max score	N	Min-Max	Mean	Mean %	SD	CV (%)
Pretest	30	40	4-14	9.375	31.25	2.55	27.2
Posttest	30	40	12-16	19.45	64.83	3.4	17.48

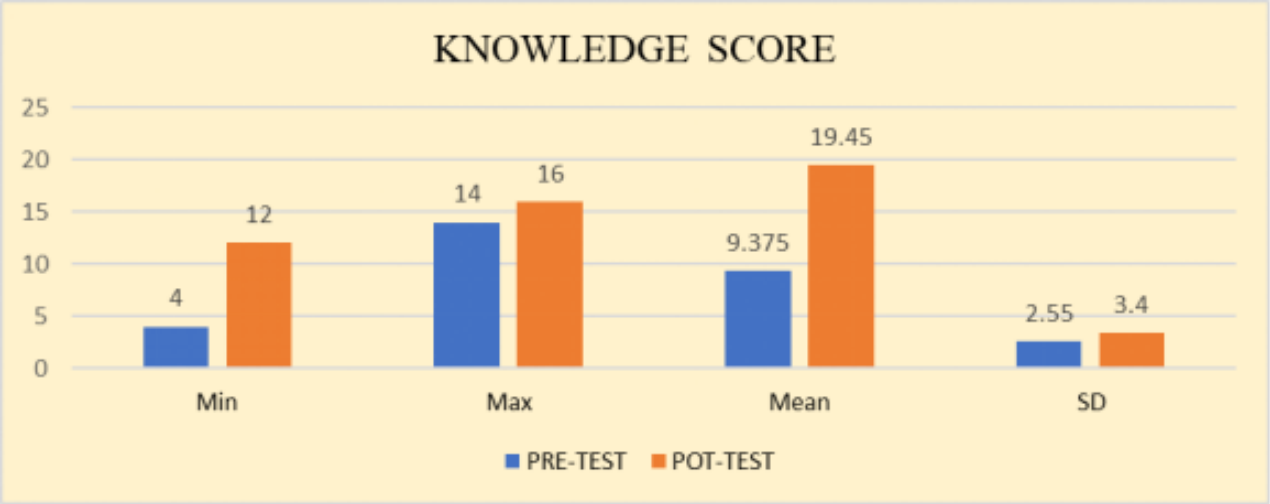

Figure 1: Knowledge Score

Above Table depicts that pre-test post-test knowledge score regarding PCOD, mean value is 9.375 and 19.5 and their mean percentage for pre-test is 31.25 and post-test is 64.83 with SD of 2.55 and 3.4 respectively.

Table 2: Distribution of study subjects to assess pre-test and post-test level of knowledge regarding PCOD.

LEVEL OF CRITERIA	PRE-TEST		POST-TEST	
	FREQUENCY	**PERCENTAGE**	**FREQUENCY**	**PERCENTAGE**
GOOD	0	0%	25	62.50%
AVERAGE	13	32.50%	15	37.50%
POOR	27	67.50%	0	0%

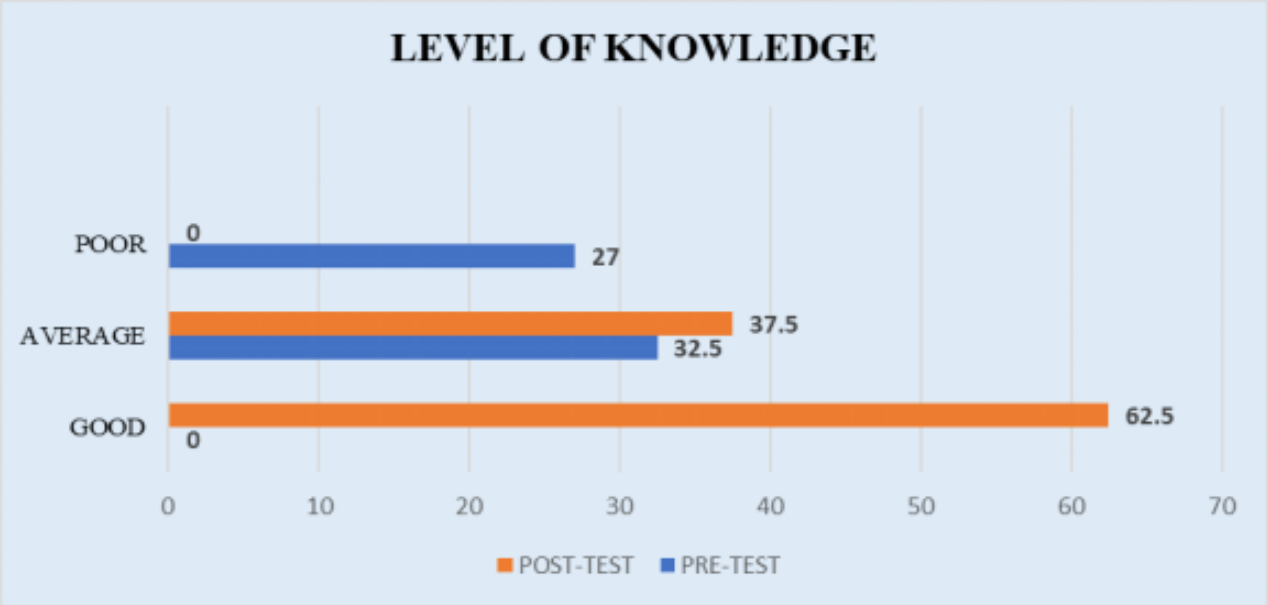

Figure 2: Level of Knowledge

Above Table shows pre-test post-test level of knowledge regarding PCOD where Good depicts 0% in pre-test and 62.5% in post-test, Average depicts 32.5% in pre-test and 37.5% in post-test and Poor depicts 67.5% in pre-test and 0% in post-test.

Table 3: Effectivess of VATP on knowledge regarding PCOD.

Test	Mean	Mean %	SD	Mean diff (Gain%)	Paired 't' value/Critical value	Inference
Pre-test	9.375	31.25	2.55	10.075(33.58)	28.57/3.56	P<0.001 HS
Post-test	19.45	64.83	3.4			

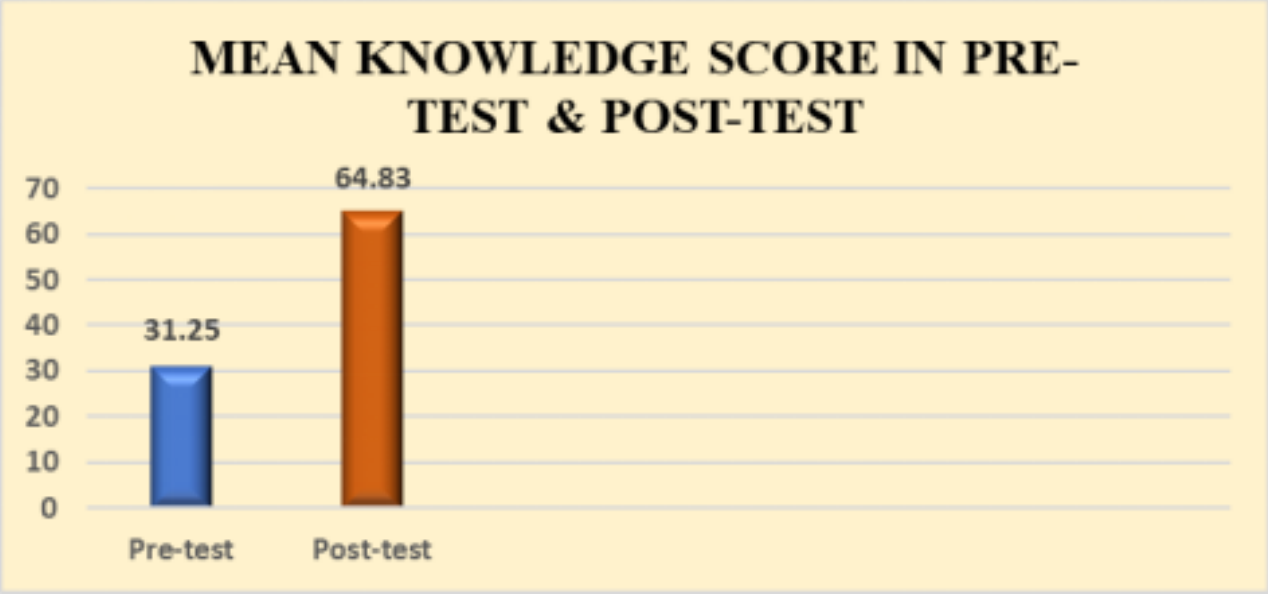

Figure 3: Mean Knowledge Score in Pre-test & Post-test

The above table compares pre-test and post-test mean knowledge scores regarding PCOD among 3rd semester students using paired t-tests. On applying the test, the difference in pre-test and post-test mean was found to be highly significant p<0.001 HS. This shows VATP was highly effective in improving the knowledge regarding PCOD among 3rd semester students in selected college of nursing.

Table :4 Effectivess of VATP on knowledge level regarding PCOD.

Test	Poor (0-7)	Average (8-14)	Good (15-20)	Total
Pre-test	27 (67.5%)	13 (32.5%)	(0%)	40 (100%)
Post-test	(0%)	15 (37.5%)	25 (62.5%)	40 (100%)
Chi square value= 50.91 df = 2 P<0.001				

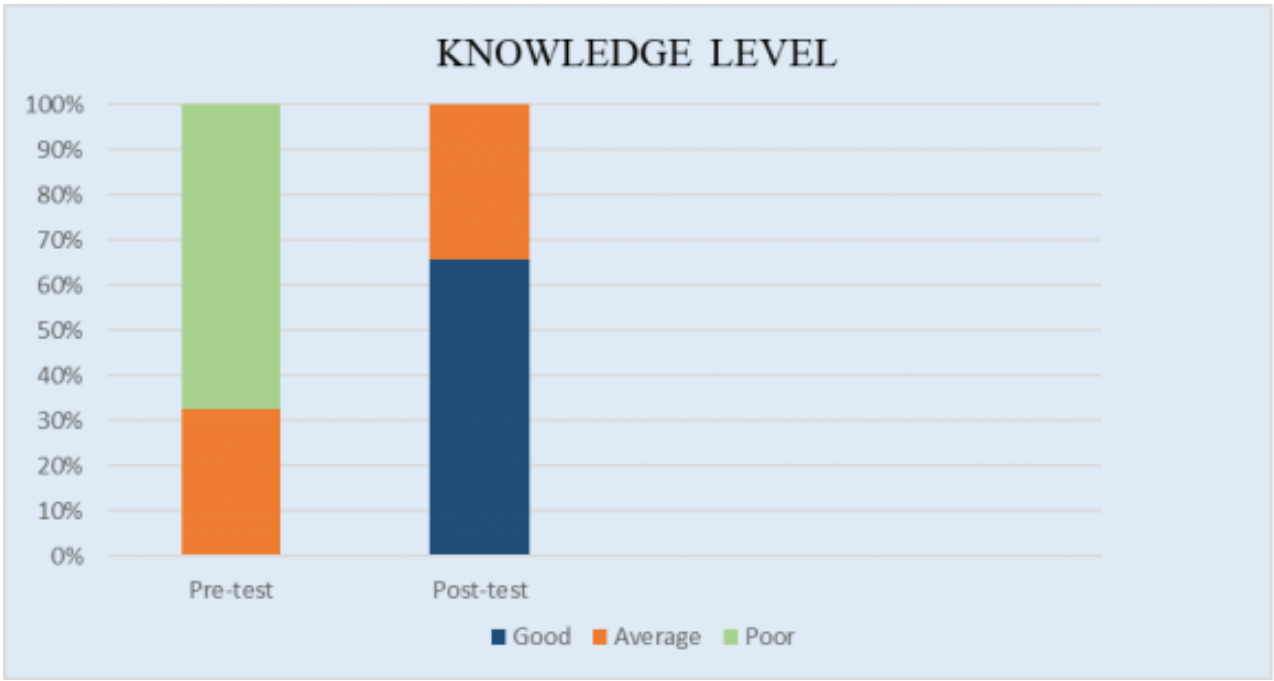

Figure :4 Knowledge Level

The above table compares knowledge level of PCOD among 3rd semester students in selected college of nursing using non-parametric chi-square test. On applying the test the difference in the distribution of samples according to knowledge criteria was found to be highly significant p<0.001. In pre-test maximum samples 67.5% were reported having poor knowledge, 32.5% were in average level. But, in Post-test maximum samples is 62.5% were reported having good knowledge and 37.5% were in average knowledge level. The improvement in post-test knowledge level shows VATP was highly effective.

Table :5 Chi-square analysis for association between pre-test knowledge score regarding PCOD with demographic variable.

S.NO	SOCIO-DEMOGRAPHIC	CALCULATED CHI SQUARE	CRITICAL VALUE	DF VALUE	SIGNIFICANCE
1	Age in Years	2.35	5.99	2	N/S
2	Monthly Income	0.007	3.84	1	N/S
3	Religion	2.356	5.99	2	N/S
4	Level of education of parents	3.65	7.82	3	N/S
5	Family history of PCOD	4.56	3.84	1	S
6	Habitat	6.71	5.99	2	S
7	Previous source of information regarding PCOD	0.13	3.84	1	N/S
8	Dietary habitat	2.27	5.99	2	N/S

Above Table 5 depicts that there is a significant association between pre-test knowledge level regarding PCOD with family history of PCOD and Habitat as the calculated chi square value (4.56,6.71) was greater than the table value (3.84,5.99) at df (1,2) respectively.

H1: There is a significant association between the pre-test knowledge level of PCOD with demographic variable among 3rd semester students with family history of PCOD and Habitat is accepted.

Hence H1 is accepted.

4. Discussion

The Major findings of the study are-

Distribution of subjects according to pre-test post-test knowledge score as assessed in Table 1 (fig. 1) mean value is 9.375 and 19.5 and their mean percentage for pre-test is 31.25 and post-

test is 64.83 with SD of 2.55 and 3.4 respectively.

Table 2 (fig.2) shows pre-test post-test level of knowledge regarding PCOD where Good depicts 0% in pre-test and 62.5% in post-test, Average depicts 32.5% in pre-test and 37.5% in post-test and Poor depicts 67.5% in pre-test and 0% in post-test.

Distribution of subjects according to mean knowledge score in Pre-test and Post-test Table 3 (fig.3) shows that mean value of Pre-test is 31.25% and mean value of Post-test is 64.83%.

Regarding effectiveness of VATP on knowledge level regarding PCOD as assessed in Table 4 (fig.4) shows that In pre-test maximum samples 67.5% were reported having poor knowledge, 32.5% were in average level. But, in Post-test maximum samples is 62.5% were reported having good knowledge and 37.5% were in average knowledge level.

Table 4 depicts that there is a significant association between pre-test knowledge level regarding PCOD with family history of PCOD and Habitat as the calculated chi square value (4.56,6.71) was greater than the table value (3.84,5.99) at df (1,2) respectively.

Thus, the research hypothesis H1 that There is a significant association between the pre-test knowledge level of PCOD with demographic variable among 3rd semester students with family history of PCOD and Habitat is accepted at 0.05 level of significance.

5. Conclusion

5.1 Implication of Study

The findings of the study have an implication for nursing profession. The implication has been listed under following headings- nursing practice, nursing education, nursing administration and nursing research.

Nursing Pratice

- Clinical nurse play an important role in advocating for PCOD friendly environment to facilitate knowledge.
- Clinical nurse should be responsible for conducting screening and performing comprehensive assessment and intervention for PCOD based on the condition of the Adolescent girls.
- The clinical nurse are in a unique position to identify and promptly manage problems of PCOD.
- Clinical nurse help in providing meal time assistance and nutrition support therapy to manage healthy weight of body.
- Clinical nurse aid to assess menstrual cycle patterns regularly.
- Clinical nurse monitor, manage and evaluate the impact of PCOD in PCOD clients (Adolescents).

Nursing Educator

- As a part of reproductive system assessment, nursing students need to be educated and trained to identify the risk factors of PCOS in community settings.

- Post graduate gynecological nursing specialization students should be trained to impart awareness regarding various gynecological problems.
- Nursing personnel at various levels need to improve their knowledge on polycystic ovarian syndrome to improve the standard of living among adolescents.
- The Nursing curriculum need to emphasize about the current concepts and trends regarding polycystic ovarian syndrome
- Journals and literatures regarding PCOS to be available in the library for the students reference.

Nurse Administrator

- The present study helps the nursing authority to recognize the need for conducting awareness programme on polycystic ovarian syndrome in schools, hospitals and community.
- Nursing administrator should provide necessary facilities to equip the staff to obtain in service programme regarding various female reproductive problems.
- The administrator should have a budget for supplying adequate monetary resources to have education materials like pamphlets, posters, slides, cassettes, models and flex to impart the knowledge in hospitals as well as in community.
- Nurse administrators can collaborate with the nursing researchers to conduct further research in utilization of awareness program regarding PCOS.

Nursing Research

- The findings of the present study can become an essential aspect of nursing as it uplift the profession by increasing the body of knowledge.
- A profession seeking to improve the quality of its practices and to enable its professional status would strive for continuous development of its body of knowledge.
- There are only few studies conducted on effectiveness of video assisted teaching program on knowledge regarding PCOD, there is necessity of more studies in this field. The findings of the study have added to the existing body of the knowledge in the nursing profession.
- Researcher may utilize the suggestions & recommendations for conducting further study. The tool & technique used has added to the body of knowledge & can be used for further references.

5.2 Recommendations

In the light of findings of the study, the following recommendations were made.

- More research need to be conducted with large sample size in different settings to increase utilization of the generalization of the findings.
- A similar study can be done by role play etc.
- Awareness and sensitization should be created by the government to help educate Adolescent girls on PCOD.
- A prevalence study can be conducted among the college students on a large scale.

- The same study can be done with one group pretest posttest design.
- A similar study can be replicated on large sample to generalize the findings.
- A comparative study can be carried out among the adolescent girls in rural and urban areas.

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