

Evaluate the Effectiveness of Video Assisted Teaching Programme on Knowledge and Attitude towards Early Identification and Management of Polycysticovarian Syndrome among Adolescent Girls

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Abstract: Polycystic ovarian syndrome (PCOS) is one of the most common reproductive endocrinological disorders with a broad spectrum of clinical manifestations affecting about 6-8% of women of reproductive years. The study was conducted to evaluate the effectiveness of video assisted teaching programme on PCOS among Adolescent's girls at Puducherry. The aim of the study to evaluate the VATP on PCOS. Methodology using quantitative approach quasi-experimental (one group pre-test post-test) research design. A total of 65 subjects were selected for study by using probability simple random sampling technique. Self-Structured questionnaire and modified attitude scale regarding early identification and management of PCOS were used as the tool. Results The findings revealed that in the pre-test, regarding the level of knowledge, in adequate 19(29.2%), and moderate 45 (69.2%) had adequate, 1 (1.6%). had unfavourable attitude 0(0%) ,moderate favourable 59(90.8%) of them favourable 6 (9.2%) . In the Post- test, regarding the level of knowledge inadequate 0 (0%) of them had moderate and 5 (7.7%) had adequate level of knowledge, 97(97%) of them had favourable and 3(3%) had moderate favourable attitude, regarding the practice, majority 65 (92.3%) . had unfavourable attitude 0(0%) and moderate favourable 36(55.4) had favourable 29(44.6%). Conclusion Study concluded that selective nursing intervention showed that the video assisted teaching programme is effective to improve knowledge for students.

Key words: PCOS, VATP, Adolescents girls.

1. Introduction

Adolescence is a period of transition between childhood and adulthood, a time of profound biological, intellectual, psychological and economic changes. During this period the individual reaches physical, sexual maturity and develops more sophisticated reasoning abilities. [1] Adolescents (13-19 years) form a large section of population, about 22.5%, ie about 225 million. According to recent statistics, one-fifth of the world's population is adolescents (WHO 1995) and in India one third of the population is between the ages of 10 and 24. [2] The transition from childhood to adolescence is a journey with full of surprises both for the parents and the children, along with many adolescent problems where they need more guidance and care. [3] The changes of adolescence have important implications for understanding the kinds of health risks to which young people are exposed, health-enhancing, risk-taking behaviour in which they engage and the major opportunities for health promotion among this population. [1]

Evaluate the Effectiveness of Video Assisted Teaching Programme on Knowledge and Attitude towards Early Identification and Management of Polycystic ovarian Syndrome among Adolescent Girls

Today is a period of modernization and its effect along with technological advancement reflects in everyday life. They are changes in lifestyle, physical activity and food intake is more concentrated on sugar, fast food and soft drinks and less on healthy, traditional fare. This unhealthy food habit, lifestyle practices and lack of exercise leads to many diseases in adolescents girls especially polycystic ovarian disease. [4] The World Health Organization (WHO) defines an adolescent as any person between 10 and 19 years. Due to the modern lifestyle, PCOS is commonly seen in the adolescent age group. The clinical manifestation of PCOS may be complete in adolescence, but the diagnosis is challenging as some features of PCOS overlap with the transitional characteristics from puberty to adulthood [7]

2. Need of the Study

PCOS is the most common endocrine pathology in reproductive-aged females worldwide, affecting between 5% and 15% of females depending on the diagnostic criteria. Based on the NIH 2012 workshop report, it is estimated that PCOS affects about 5 million reproductive-aged females in the United States. Multiple conditions have been associated with PCOS, including infertility, metabolic syndrome, obesity, impaired glucose tolerance, DM-2, cardiovascular risk, depression, endometrial cancer. Higher prevalence has been associated in first-degree relatives with PCOS, prepubertal obesity, congenital virilizing disorders, above-average or low birth weight for gestational age, premature adrenarche, use of valproic acid as an antiepileptic drug. Studies have also suggested that there is a higher prevalence in Mexican-Americans than non-Hispanic whites and African Americans [6]

3. Statement of the Problem

A Study to evaluate the effectiveness of video assisted teaching programme on knowledge and attitude towards early identification and management of polycystic ovarian syndrome among adolescent girls in selected colleges at Puducherry.

Objectives

- To assess the level of knowledge and attitude regarding early identification and management of polycystic ovarian syndrome.
- To evaluate the effectiveness of video assisted teaching on early identification and management of polycystic ovarian syndrome.
- To associate the pretest and post test level of knowledge and attitude towards polycystic ovarian syndrome with selected demographic variables.

4. Operational Definitions

Evaluate

It refers to determining the ideas or facts and expressing them quantitatively like numerical expressions.

Effectiveness

It refers to the significant gain in knowledge and attitude towards polycystic ovarian syndrome after video assisted teaching which was determined by pretest and posttest knowledge score.

Video Assisted Teaching

It denotes the planned teaching programme which was imparted through video among adolescents about Polycystic ovarian syndrome for 30mins with lecture-cum-discussion method, by the investigator.

Knowledge

It refers to knowing of facts and skills regarding PCOS which was acquired through VATP and experience measured by self-structured questionnaire.

Attitude

It refers to the way of thinking and feelings regarding PCOS which was expressed in the form of statement assessed by modified attitude scale.

Early identification and management of PCOS It refers to recognizing someone or something. Management is the process of dealing with or controlling people.

It refers to the understanding of the samples regarding early identification, signs and symptoms, diagnostic evaluation, management and the prevention of complications of PCOS.

Polycystic ovaries

A hormonal disorder causing enlarged ovaries with small cysts on the outer edges, Symptoms include menstrual irregularity, excess hair growth, acne and obesity.

Adolescents

Adolescence is the phase of life between childhood and adulthood, from ages 10 to 19. It is a unique stage of human development and an important time for laying the foundations of good health. Adolescents experience rapid physical, cognitive and psychosocial growth. – WHO-Age group 10-19 years (for our study 17-21 years).

Evaluate the Effectiveness of Video Assisted Teaching Programme on Knowledge and Attitude towards Early Identification and Management of Polycystic ovarian Syndrome among Adolescent Girls

Assumptions

1. Video assisted teaching programme will improve the knowledge and attitude regarding early identification and management of Polycystic ovarian syndrome among adolescents.
2. The level of knowledge about polycystic ovarian syndrome enhances practice towards prevention of polycystic ovarian syndrome among adolescents.

Hypothesis

H1: There will be significant difference between pre and post-test level of knowledge and attitude among adolescent's girls.

Delimitations

The study is delimited to

- Adolescent girls between the age group of 17-21 years.
- Data collection period is limited to 4 weeks.

Samples are only from the selected colleges.

5. Review of Literature

Mrs. V.Santhi, et al. (2021) Non-experimental descriptive study was conducted to assess the level of knowledge on PCOS among 50 B.sc nursing students from II year and III year in Sri Ramachandra Institute of higher education and research (DU), Chennai. They were used convenience sampling structured questionnaire. The study revealed that majority of the students of 2nd and 3rd year had moderate level of knowledge on polycystic ovarian disease. ^[10]

Megha Sharma, et al. (2021) conducted a Systematic review and met analysis to estimate the pooled prevalence of PCOS among Indian adolescent girls (14-19 years). With the help of a search strategy, two authors searched Scopus, Embase and Pubmed independently. Selected studies were assessed for quality and risk biases using the NIH tool. R software was used for analysis. The prevalence of PCOS among adolescents based on the Rotterdam criteria was 17.74 per 100 (CI = 11.77-23.71) with $I^2 = 97\%$. Hospital-based studies had a comparatively higher prevalence of PCOS as compared to community-based. ^[26]

Ms. Chitra Varghese, et al. (2020) A Quasi experimental study conducted to assess the knowledge and effectiveness of video assisted teaching regarding PCOS. with the use of non-probability convenient sampling one group pre-test post-test study was conducted. The study involved 100 nursing students of M.V.P. Samaj's Institute of Nursing Education, Nasik. Structured knowledge questionnaire was administered to the samples. This study revealed that there was significant improvement in the knowledge of nursing students related to polycystic ovarian syndrome, its early diagnosis and management. ^[19]

6. Methodology

Variables

Variables included in the study were;

1. Independent Variable: Video assisted teaching programme.
2. Dependent Variable: Level of Knowledge and attitude towards PCOS.
3. Extraneous Variable: Individual difference in subjects, among peer group, social influence.

Setting of the study

The participants of the study were selected from selected Government Arts and Science (Bharathidasan women's college and Tagore) colleges in Puducherry.

Population

Accessible population:

17-21 years of age who are studying at selected college in Puducherry.

Sample and sampling technique

Adolescents girls who were studying in Arts and Science colleges in Puducherry and who were fulfilling the inclusion criteria.

Sampling technique

Simple random sampling technique. The study consisted of 65 Adolescents girls.

Criteria for selection of the sample

Inclusion criteria

- Adolescents girls in the age of 17-21 years
- Those who are willing to participate
- Those who know to read and write Tamil (or) English

Exclusion criteria

- Those who were not available at the time of data collection

Evaluate the Effectiveness of Video Assisted Teaching Programme on Knowledge and Attitude towards Early Identification and Management of Polycystic ovarian Syndrome among Adolescent Girls

- Those who were diagnosed with PCOS

Development of data collection instruments

The tool used for this study self-structured questionnaires for assessing knowledge and Likert scale for attitude were developed after extensive review of literature and experts, advice by the researcher.

Section - I:

Demographic variables;

- It includes Age, Religion, Dietary Pattern, Age at menarche, Family Income, Education Of Parents, Occupation Of Parents, Family History Of PCOS, Previous Information about PCOS.

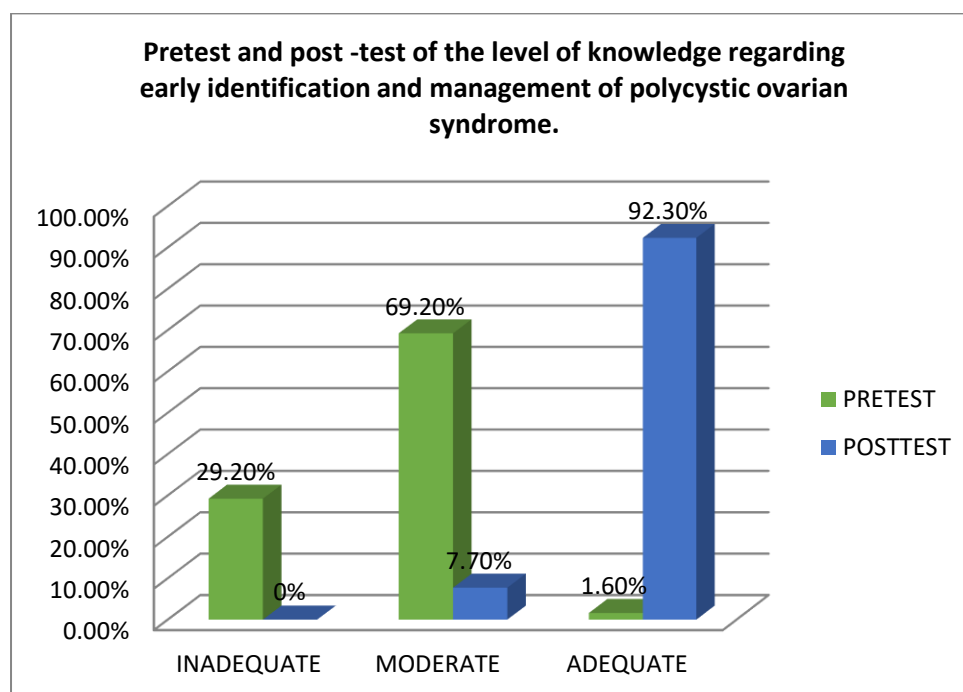
Section II:

- Self structured knowledge questionnaire was used, it consisted of 25 items such as definition, causes, risk factors, signs and symptoms and management about early identification and Management of PCOS.
- Right answers was scored as 1, wrong answers was scored as 0.

7. Analysis and Discussion

Assessment of pre-test and post-test of the level of knowledge and attitude regarding early identification and management of polycystic ovarian syndrome.

Level of knowledge	Pretest		Post test	
	N	%	N	%
INADEQUATE	19	29.2	0	0
MODERATE	45	69.2	5	7.7
ADEQUATE	1	1.6	65	92.3
Mean Standard deviation	12.76±3.37		22.40±2.178	

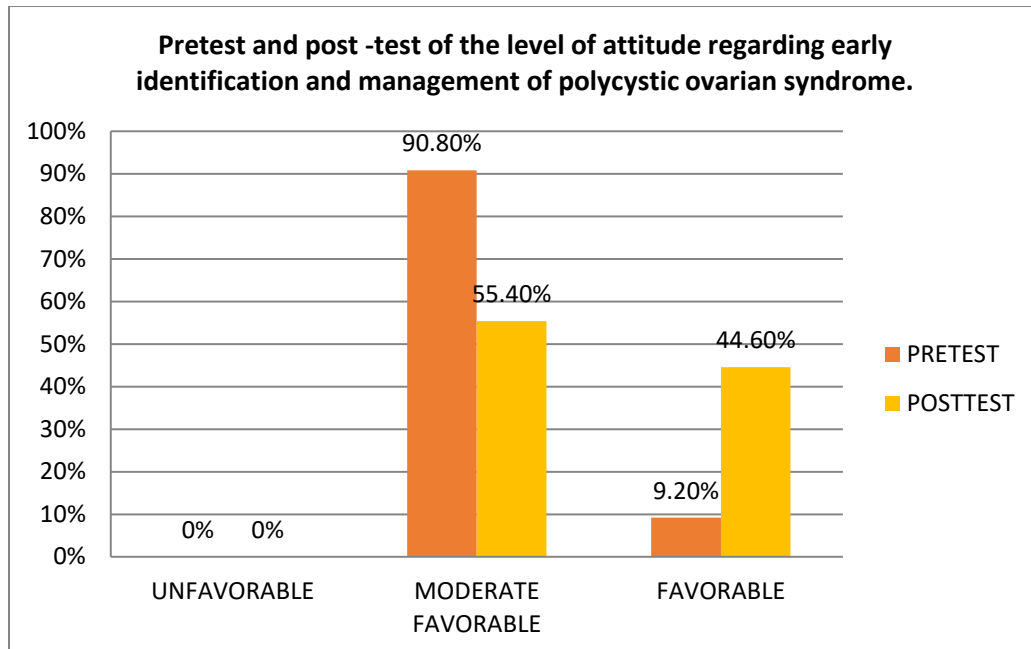


Frequency and percentage wise distribution of pretest and post -test of the level of attitude regarding early identification and management of polycystic ovarian syndrome.

Level of attitude	Pretest		Post test	
	N	%	N	%

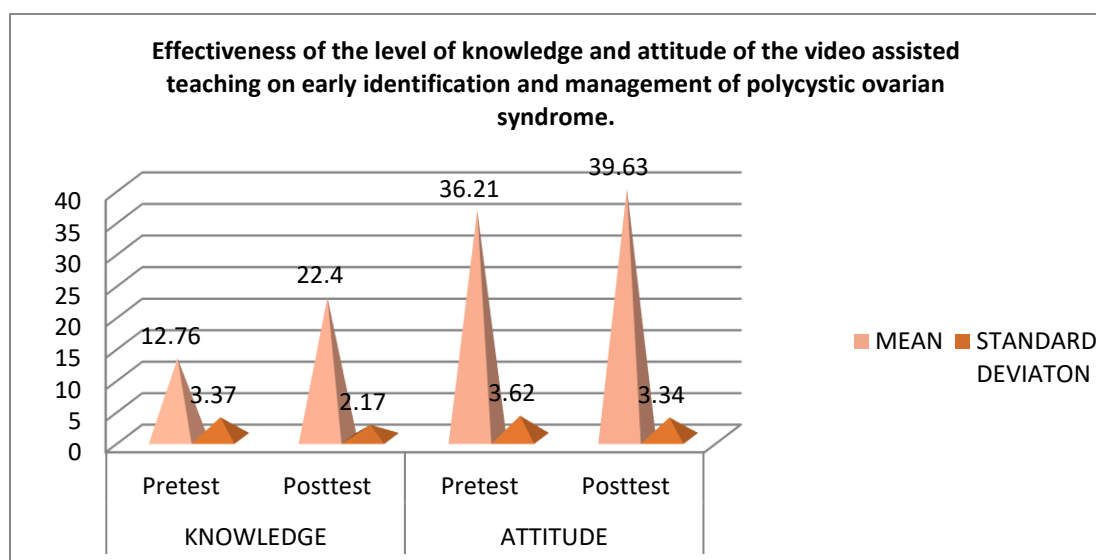
Evaluate the Effectiveness of Video Assisted Teaching Programme on Knowledge and Attitude towards Early Identification and Management of Polycystic ovarian Syndrome among Adolescent Girls

Unfavorable	0	0	0	0
Moderate Favorable	59	90.8	36	55.4
Favorable	6	9.2	29	44.6
Mean	36.21±3.62		39.63±3.34	
Standard deviation				



Effectiveness of the level of knowledge and attitude of the video assisted teaching on early identification and management of polycystic ovarian syndrome.

Group	Test	Mean	Standard deviation	Mean difference	't' value Paired -t test	df	'p' value
Knowledge	Pretest	12.76	3.37	-9.63	-20.6	64	0.000** HS
	Posttest	22.4	2.17				
Attitude	Pretest	36.21	3.62	-3.41	-5.44	64	0.000** HS



Limitation

- The researcher faced difficulty to obtain permission for the study.
- The study was limited to adolescent girls studying in selected college at Puducherry.

8. Recommendation

- A prevalence study can be conducted among the community people on a large scale.
- The same study can be done with quasi experimental one group control and experimental 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.

9. Summary

The primary aim of the present study is to evaluate the effectiveness of video assisted teaching programme on knowledge and attitude regarding early identification and management of polycystic ovarian syndrome among adolescent girls in selected colleges at Puducherry.

Literature review was organized as follows.

- Literature related to prevalence of Polycystic Ovarian Syndrome.
- Literature related to knowledge and attitude on video assisted teaching programme regarding Polycystic Ovarian Syndrome.

The conceptual framework of this study was based on health promotion model.

The research design adopted for this study was pre experimental one group pre-test post-test design. Independent variable in the study is the video assisted teaching program and dependent variable is the level of knowledge and attitude among adolescent girls. Self-Structured questionnaire and modified attitude scale was used after confirming the validity and reliability.

10. Conclusion

Polycystic ovarian syndrome is a condition in which the adolescent has a imbalance of female sex hormones. It may lead to changes in the menstrual cycle, cyst in the ovary, failure to conceive and other health problems. The preventive measures knowledge will help the adolescent girls, to improve their knowledge in day today life. In the present study, majority of the adolescent girls had inadequate knowledge and unfavourable attitude regarding PCOS. After the video teaching program, the level of knowledge and attitude had increased significantly. The findings indicate that, video teaching program is an effective intervention in improving the level of knowledge and attitude regarding PCOS among Adolescents girls. Video assisted teaching program is found to be affordable, comfortable and effective.

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Evaluate the Effectiveness of Video Assisted Teaching Programme on Knowledge and Attitude towards Early Identification and Management of Polycystic ovarian Syndrome among Adolescent Girls

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