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**

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| **Background:** 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 inadequate0 (0%) of them had moderate and 5  (7.7%) had adequate level oknowledge,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. |

**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]

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]

**NEED FOR 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]

**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.

**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 post test 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).

**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.

**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 metanalysis

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 I² =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&#39; 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]

**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:**

17-21years 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

 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.

**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** | **%** |
| UNFAVORABLE | 0 | 0 | 0 | 0 |
| MODERATE FAVORABLE | 59 | 90.8 | 36 | 55.4 |
| FAVORABLE | 6 | 9.2 | 29 | 44.6 |
| **Mean**  **Standard deviation** | 36.21±3.62 | | 39.63±3.34 | |

**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 deviaton** | **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** |
| **Posttest** | 39.63 | 3.34 |

**LIMITATION**

 The researcher faced difficulty to obtain permission for the study.

 The study was limited to adolescent girls studying in selected college at

Puducherry.

**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.

**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.

**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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