International Journal of Advanced Multidisciplinary Research and Studies

Effectiveness of You Tube Assisted Teaching on Prevention of Polycystic Ovarian Syndrome among Adolescent Girls

[1] **Greeshma KC**, [2] **Senthilkumar T**, [3] **Arya MS**, [4] **Athira P**, [5] **Rosmine Mathew K**, [6] **Sona Raj**, [7] **Surabhi KM**
[1] Assistant Professor, Department of Obstetrics and Gynaecological Nursing, Lourde college of Nursing, Kerala, India
[2] Professor cum Principal, Lourde College of Nursing, Kerala, India
[3, 4, 5, 6, 7] Final Year BSc Nursing Students, Lourde College of Nursing, Taliparamba, Kannur, Kerala, India

Corresponding Author: **Greeshma KC**

Abstract
Introduction: Women with polycystic ovarian syndrome may experience menstrual cycle abnormalities, increased androgen levels, excess hair growth, acne and obesity. The aim of the study was to assess the effectiveness of YouTube assisted teaching on knowledge regarding prevention of polycystic ovarian syndrome among adolescent girls in selected colleges, Kerala.
Methods: The descriptive and evaluative approach was used for this study. Non probability convenient sampling technique was used to select the sample. The data was analysed using descriptive and inferential statistics, on the basis of the objectives and hypothesis of the study.
Results: The result of the study showed that there is significant difference in the pre-test and post-test knowledge score. In pre-test, students had the mean score of 5.48 and after YouTube assisted teaching program the knowledge level was improved to 18.1.
Conclusion: The findings of the study indicate that YOU TUBE assisted teaching on prevention of polycystic ovarian syndrome improved the knowledge of the adolescent girls.

Keywords: Polycystic Ovarian Syndrome, You-Tube Assisted Teaching, Effectiveness

Introduction

Polycystic Ovarian Syndrome (PCOS) is one of the Emerging disorders of women in reproductive age group can lead to a number of complications such as infertility and metabolic syndrome which affects their life in all aspects.[1] To reduce the incidence of PCOS take some healthy measures like physical exercises, healthy food habits to prevent the weight gain that us very effective in decreasing many health conditions associated with PCOS.[2]

Polycystic ovarian syndrome comes among the list of disease that need to be hunted, not only treated with awareness we can easily fight against this disease. Everyone among us will circulate that information and hunt this disease down at the earliest. Gynaecological problems of adolescence occupy a special space in the spectrum of gynaecological disorders of all ages. This is because of the nature of the problems with a problem which so unique, special and specific for the age group, and also because of the associated and psychological factors which are very important in the growth and psychological remodeling of someone in the transition between childhood and womanhood. Although the polycystic ovarian syndrome is a common disorder, the diagnosis may be overlooked during adolescence; irregular menses with an ovulatory cycles, obesity, and acne are frequent in adolescent women. The incidence of the polycystic ovarian syndrome among adolescents is estimated to be between 11 and 26% and above 50% is overweight.[3]

There is no cure for the polycystic ovarian syndrome, but controlling it lowers the risk of infertility, diabetes, miscarriages, heart disease and cancer. Present day Lifestyle food habits, environmental exposure to toxins along with the hereditary predisposition for a metabolic syndrome like obesity, hyperlipidaemia diabetes, stress and hypertension have contributed to the common problem faced by today's female population.

The studies on polycystic ovarian disease and structured teaching programs help adolescent girls to prevent complications like diabetes, obesity, hypertension etc. and to identify the persons who are at risk. The uses of technology help adolescent girls to prevent polycystic ovarian syndrome by gaining information from YouTube and from other social networks. These scientific discoveries help to improve health and to prevent diseases such as polycystic ovarian syndrome in adolescence in girls.

Need for the study

Polycystic ovarian syndrome is an increasingly common health problem among adolescent girls and young women in

their reproductive years. It is a problem of imbalance of hormones in women which leads to menstrual irregularity as well as multiple abnormal cysts in the ovaries which are enlarged so they do not produce normal eggs and normal ovulation which makes it difficult to become pregnant. If left untreated over time, it can lead to serious health problems like diabetes, heart disease etc.[4]

PCOS affects 8% to 20% of women of reproductive age all over the world. Since there is no universal definition for PCOS, an exact number of women with PCOS in the United States are unknown, but it is thought to be about 5 million. Most women are diagnosed in their twenties and thirties. But PCOS can affect girls as young as 11, who haven't even had their first period.

PCOS is the most common endocrinological disorders in adolescence; therefore, it is always necessary to investigate all new relevant data. Early identification and prompt management of PCOS in adolescents is important to prevent long term complications.

The main benefits of information technology and You Tube videos is to raise the awareness of the Polycystic ovarian syndrome worldwide, providing educational and support services to helps people understand what the disorder is how it can be treated. It also helps support for people diagnosed with polycystic ovarian syndrome to help them overcome the syndrome and decrease the impact of its associated health problems. Public awareness through these technologies is necessary because over half of the 10,000,000 people that have it, are unaware of it. Awareness through technologies helps the public understand that symptoms like irregular periods and pelvic pain are not something to be ignored and getting it checked is necessary.[5]These all can be considered to as the main benefits of awareness through the information technologies and YouTube videos. [6]

Statement of the problem
A study to assess the effectiveness of YouTube assisted teaching on knowledge regarding prevention of polycystic ovarian syndrome among adolescent girls in selected colleges, Kerala.

Objectives
The objectives of this study are to:
▪ To assess the pre-test knowledge regarding prevention of polycystic ovarian syndrome among adolescent girls.
▪ To assess effectiveness of You Tube assisted teaching program on prevention of polycystic ovarian syndrome among adolescent girls.
▪ To associate the knowledge score with selected demographic variables.

Hypotheses
▪ There is a significant difference in the level of knowledge regarding prevention of PCOS among adolescent girls after a teaching program.
▪ There is a significant association between knowledge of adolescent girls regarding PCOS and the selected demographic variables.

Assumption
▪ Adolescent girls gain some knowledge regarding PCOS.
▪ Adequate knowledge regarding polycystic ovarian

syndrome decrease risk of developing PCOS among adolescent girls.
▪ The YouTube assisted video teaching will improve the knowledge of prevention of polycystic ovarian syndrome among adolescent girls.

Materials and Methods
Research Approach
Descriptive and evaluate approach was used in the study. Descriptive approach was used to assess the knowledge of adolescent girls on prevention of polycystic ovarian syndrome. Evaluative approach was used to assess the effectiveness of You Tube assisted teaching on prevention of polycystic ovarian syndrome among adolescent girls.

Research Design
Quasi experimental one group pre-test-post-test design was adopted for the study.

O1 x O2

O1 - Pre - test assessment of knowledge on prevention of polycystic ovarian syndrome among adolescent girls.
X-Intervention with You Tube assisted video.
O2 -Post – test assessment of knowledge on polycystic ovarian syndrome among adolescent girls.

Variables
Dependent variables
In the study, the dependent variable is the knowledge of adolescent girls under the study.

Independent variables
In the study, the independent variable is the You Tube assisted teaching on prevention of polycystic ovarian syndrome.

Setting of the study
The present study was conducted in selected colleges, Kerala.

Sample
In this study, the sample comprises 120 adolescent girls in selected colleges in Kerala who meet the inclusion criteria.

Sampling technique
Non – probability convenient sampling techniques was adopted to select the sample from the population.

Inclusion criteria
▪ College adolescent girls who are adolescent girls in the age group of 17-19 yrs.
▪ College girls who are willing to participate in the study.
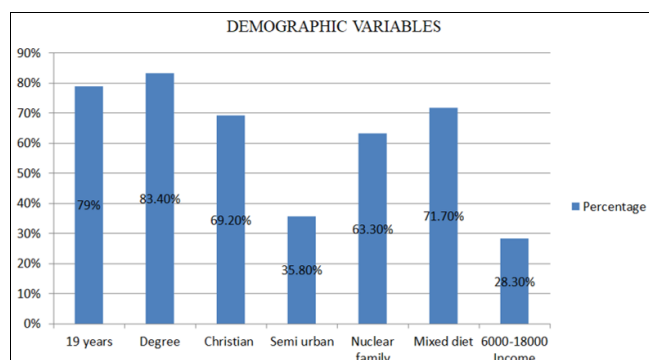▪ Selected colleges in Kerala.

Exclusion criteria
▪ Adolescent girls who are not willing to participate in the study.
▪ Adolescent girls who are not having the internet facility.

Description of the tool
The structured multiple-choice questionnaire was developed to assess the level of knowledge about Polycystic Ovarian

Syndrome. A You Tube video was prepared by the researcher on prevention of polycystic ovarian syndrome.

Results

Fig 1: Frequency and percentage distribution of the samples based on the Demographic variables

Fig 1: showed that, majority (79% of the samples were in the age of 19 years, 83.4% were studied degree, 69.2% of the samples were Christian, 35.8% of the samples were lived in a semi-urban area, 63.30% samples were from the nuclear family, 71.7% samples were taking mixed diet, 28.3% of the samples had the monthly income of INR 6000-18000.

Table 1: Evaluation of effectiveness of YouTube assisted teaching program in terms of gain in knowledge score, n=120

S. No	Test	Mean	Standard deviation	't' value
1.	Pre test	5.48	3.109	38.59
2.	Post test	18.1	1.8	

* Significant at $p<0.05$

The table depicts between the pre- test and post- test knowledge scores. The mean score for the pre -test is 5.48 and the mean post -test score is 18.1. The calculated "t" value 38.59 is greater than the table value for df 238 which is 1.96. The level of significant is 0.05.

Thus, there is a significant difference in the mean pre- test knowledge score and the mean post-test knowledge score.

Table 2: Association between pre-test knowledge score and selected demographic variables

S. No	Demographic Variables	df	X2 value	Inference
1	Age in years	4	72.68	Significant
2	Educational Status	6	10.92	Not significant
3	Religion	6	2.56	Not Significant
4	Residence	4	7.9	Not Significant
5	Type of family	6	11.08	Not Significant
6	Occupation of father	6	9.68	Not Significant
7	Occupation of mother	6	20.079	Significant
8	Dietary pattern	4	1.98	Not Significant
9	Monthly family income	18	14.01	Not Significant

The table reveals that there was a significant association between age and occupation of mother and the pre-test knowledge. And there is no significant association between the educational status, religion, residence, type of family, occupation of father, dietary pattern and income with the pre-test knowledge.

Discussion

The aim of the study was to assess the effectiveness of YouTube assisted teaching on knowledge regarding prevention of polycystic ovarian syndrome among adolescent girls in selected colleges, Kerala. The study findings revealed that the YouTube assisted teaching is one of the effective strategies to improve the knowledge of the people. A similar study conducted among high school girls at Mangalore.

Conclusion

Polycystic ovarian syndrome is a common health problem among adolescent girls and young women. The study was undertaken to assess the level of knowledge among adolescent girls of selected colleges regarding polycystic ovarian syndrome before and after giving a You Tube assisted teaching program and the results showed that after the administration of the You Tube assisted teaching programme there was a significant increase in knowledge in the areas. Indeed, it can be concluding that the YouTube assisted teaching programme is an effective method to improve the knowledge among students regarding PCOS.

References

1. Martins IC, Pinto KB, Soares MC. Representation of uterus. Journal of research fundamental online. 2013; 5(4):547-582.
2. Erin Lanzo, Maria Monge, Maria Trent. Diagnosis and Management of Polycystic Ovary Syndrome in Adolescent Girls, National Library of Medicine | National center for Biotechnology Information, Sep 2015. Retrieved February 10, 2022, from: https://www.ncbi.nlm.nih.gov/PMC/articles/PMC56592 05/
3. Devi AG. A study to assess the effectiveness of information education communication on knowledge regarding polycystic ovarian syndrome among adolescent girls, Theni, Tamil Nadu. tnmgrmu. 2017; 9(10):23-30.
4. Williams S, Lissa J, Saraswathi KN. A study to assess the effectiveness of structured teaching program on knowledge regarding polycystic ovarian syndrome among adolescent girls in selected college, Mysuru. Asian Journal of Nursing Education and Research. 2017; 7(3):371-375.
5. Sowmya MA, Fernandez P. A study to assess the effectiveness of structured teaching program on knowledge regarding polycystic ovarian syndrome among adolescent girls. Nitte University Journal of health sciences. 2013; 3(3):54-58.
6. Tal Grunwald MD, Polycystic ovarian syndrome (PCOS), Kids Health, 2021. Retrieved February 10, 2022, from: https://kidshealth.org/ws/RadyChildrens/en/teens/pcos.h tml/
7. D'souza P. A study to assess the effectiveness of planned teaching programme on polycystic ovarian syndrome among adolescent girls, Mangalore. Journal of Health and Allied Sciences, Nitte University. 2013; 3(3):101-104.
8. Batra B, Tiwari S. An experimental study to assess the effectiveness of planned teaching programme on knowledge of adolescent girls of higher secondary school Age Group (14-17 Years) regarding polycystic ovary syndrome at Vijaya raje government girls school,

Ujjain, Madhya Pradesh. Trends in Nursing Administration and Education. 2018; 7(2):4-11.

9. Gomathi B, Mahalingam V, Rawat S. Structured teaching program on knowledge regarding polycystic ovarian syndrome among adolescent girls. International journal of research in medical sciences. 2017; 5(11):5004-5008.

10. Farhat AG, Mansour MB, Attieh RW. A study on dietary approaches for polycystic ovarian syndrome. Nutrition and Food Science. 2014; 41(5):326-343.

11. Priyanka SB, Brundha PM. Awareness on polycystic ovarian syndrome among females of age 18-30 years. Journal of pharmaceutical sciences and research. 2016; 8(8):813-816.

12. Nitin Joseph, *et al*. A study on proposition and determinants of polycystic ovarian syndrome among health science students in South India. Journal of natural science biology and medicine. 2016; 7(2):166-172.