Orginal Research

A Study to Assess the Effectiveness of Structured Teaching Programme (STP) on Knowledge Regarding Polycystic Ovarian Disease (PCOD) Among Adolescent Girls of Selected Schools, Faridkot, Punjab

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ABSTRACT

This study was conducted to assess the effectiveness of structured teaching programme (STP) on knowledge regarding polycystic ovarian disease (PCOD) among adolescent girls of selected schools, Faridkot, Punjab. A quantitative research approach and quasi-experimental research design was used for the study. The sample size was 60 adolescent girls, 30 in experimental group and 30 in control group selected by non-probability purposive sampling technique. The data was collected by Self Structured knowledge questionnaire. Descriptive and inferential statistics were used to analyze the data. Discussion was based on objectives of the study, statistical analysis, current trends and previous related research. The study revealed that in control group and experimental group pre-test level of knowledge 20% adolescent girls had adequate knowledge, 80% had inadequate knowledge and 23.3% had adequate knowledge, 76.7% had inadequate knowledge respectively. There was no significant relationship between the level of knowledge of adolescent girls with their selected demographic variables both in experimental and control group. In control group pre-test and post-test mean ± SD for knowledge of adolescent girls were 10.07 ± 2.815 and 9.37 ± 2.906 respectively. The difference between mean ± SD of pre-test and post-test level of knowledge of control group was statistically non significant at $p<0.05$ level. In experimental group pre- test and post-test mean ± SD for knowledge score of adolescent girls was 10.33 ± 2.591 and 20.00 ± 4.807 respectively. The difference between mean ± SD of pre-test and post-test level of knowledge of experimental group was statistically significant. Hence, structured teaching programme was effective in improving the knowledge regarding Polycystic Ovarian Disease among adolescent girls of experimental group.

Keywords: Knowledge, Polycystic Ovarian Disease, Adolescent Girls. Structured Teaching Programme.

INTRODUCTION

PCOD is the most prevalent cause of infertility in the United States, affecting 5 to 6 million women, according to the Hormone Foundation. PCOD has an effect on 35% of Indian teenagers. Women in their reproductive years account for at least 80% of all instances of persistent menstrual irregularity. It accounts for 15% to 25% of infertility cases. A woman may have symptoms of PCOS without matching the diagnostic criteria, which often include irregular or nonexistent periods, evidence of increased androgens, or hormones of the male gender. The rise in childhood obesity has resulted in an earlier beginning of menstruation, which has led to the emergence of PCOD in younger girls. PCOD patients

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will have to deal with the long-term health repercussions for many more years.[1]

PCOD is a frequent health issue that affects many young women, especially girls. Women in their reproductive years are affected by it, and it is regarded to be one of the most common reasons of infertility[2] .

Although environmental and genetic variables have been linked to the development of PCOD, the exact aetiology of the condition remains a mystery. Currently, scientists are trying to figure out if the ovary, the hypothalamus-pituitary axis, or aberrant insulin activity is to blame for the illness. Adolescents as well as women of reproductive age and post-menopausal women might suffer from the illness. As a result, it is impossible to pinpoint a particular gene mutation as the cause. In fact, the condition often runs in families, indicating that it may be inherited.[3]

PCOD does not have a cure, although it may be treated and controlled in numerous ways. Many of the health problems connected with PCOD, such as high blood pressure and diabetes, may be reduced significantly if a woman loses weight. In some cases, weight reduction alone may bring hormone levels back to normal, reducing or eliminating many of the symptoms. Weight gain may be prevented by adopting healthy eating and activity habits. Assisting and learning from one's peers who are also dealing with PCOD is a rewarding experience. As a result, the presence of polycystic ovaries on ultrasound is a symptom of PCOD rather than proof of the illness.[4]

NEED FOR THE STUDY

The health of a country's youth is crucial to its overall health. PCOD affects 35 percent of Indian teens. It's mostly because of the changes in lifestyle. The rise in PCOD diagnoses among Indian women is mostly due to the adoption of poor eating habits and a lack of physical activity. Older Indian women, on the other hand, consume more traditional, lower calorie, and sugar-free cuisine. Increasing numbers of young Indian women are consuming a diet of fast food. Indians have increasingly relied on Western meals and lifestyles during the last two decades. Obesity prevalence is expected to rise by up to six fold in the next 10 years, notably in India, which currently has the highest diabetes prevalence rates in the world (WHO 2009). As a result, they are better able to identify and prevent PCOD's consequences, such as type 2 diabetes, high blood pressure, and cardiovascular disease.[5]

According to the majority of research, polycystic ovaries are present in 3-7 percent of women globally. It is believed that the prevalence in India is at least three times that in the West. Menstrual irregularities, infertility, hirsutism , acne, obesity, and the metabolic syndrome are just a few of the health issues that PCOD may cause. Ultrasonography-detected polycystic ovaries, unpredictable ovulation, and high levels or activity of male hormones are the primary signs of polycystic ovary syndrome (hyperandrogenism). Diabetes type 2 is also more prevalent in women with PCOD.[6]

RESEARCH PROBLEM

A study to assess the effectiveness of structured teaching programme (STP) on knowledge regarding Polycystic Ovarian Disease among adolescent girls of selected schools, Faridkot, Punjab.

OBJECTIVES

1. To assess the pre-test level of knowledge regarding Polycystic Ovarian Disease (PCOD) among adolescent girls in control and experimental group.
2. To prepare and administer structured teaching programme (STP) regarding Polycystic Ovarian Disease (PCOD) among adolescent girls in experimental group.
3. To assess the post-test level of knowledge regarding Polycystic Ovarian Disease (PCOD) among adolescent girls in control and experimental group.

4. To assess the effectiveness of structured teaching programme (STP) by comparing pre- test and post-test level of knowledge regarding Polycystic Ovarian Disease (PCOD) among adolescent girls in control and experimental group.
5. To find out the significant association between post-test level of knowledge regarding Polycystic Ovarian Disease (PCOD) among adolescent girls in control and experimental group with their selected demographic variables.

RESEARCH HYPOTHESIS

H_1: There will be significant difference between the pre-test and post-test level of knowledge score among adolescent girls in experimental group.

METHODOLOGY

- **Research Approach:** A quantitative research approach was used.
- **Research Design:** A quasi-experimental research design was used.
- **Target Population:** Adolescent girls of age 15-18 years in +1 and +2 class in selected schools.
- **Sample Size:** 60 adolescent girls, (30 for Experimental group and 30 for Control group.)
- **Sampling Technique:** purposive sampling technique was used.
- **Tool:** Socio demographic variables, Self-structured knowledge Questionnaires, Structured Teaching Programme.

Inclusion criteria:

1. Adolescent girls who were willing to participate in the study of selected schools of Faridkot, Punjab.
2. Adolescent Girls in the age group of 15-18years.

Exclusion Criteria

Adolescent girls were not available at the time of data collection.

FINDINGS

Table 1 depicts that in experimental group 7(23.3%) adolescent girls had adequate knowledge and 23(76.7%) girls had inadequate knowledge. In control group 6 (20.0%) adolescent girls had adequate knowledge and 24(80%) had inadequate knowledge.

Hence, maximum adolescent girls were having in adequate knowledge about Polycystic Ovarian Disease (PCOD) in both control and experimental group.

Table 2 depicts that in experimental group 25 (83.3%) adolescent girls had adequate knowledge and 5(16.7%) had inadequate knowledge. In control group 8(26.7%) had adequate knowledge and 22(73.3%) had inadequate knowledge.

Hence, maximum adolescent girls having adequate knowledge about Polycystic Ovarian Disease (PCOD) in experimental.

Table 3 depicts that in experimental group pre-test the mean ± SD for the knowledge score of adolescent girls was10.33 ± 2.591and post-test for knowledge score of adolescent girls was 20.00 ± 4.807. The difference between pre-test and post-test knowledge score of experimental group was statistically significant at level of 0.05.

Table 1: Pre-test level of knowledge regarding Polycystic Ovarian Disease (PCOD) among adolescent girls in control and experimental group.

N=60

Level of Knowledge	Score	Experimental group		Control group	
		f	%	f	%
Adequate	13-25	07	23.3	06	20
Inadequate	0-12	23	76.7	24	80

Table 2: Post-test level of knowledge regarding Polycystic Ovarian Disease (PCOD) among adolescent girls in control and experimental group.

N=60

Level of Knowledge	Score	Experimental group		Control group	
		f	%	f	%
Adequate	13-25	25	83.3	06	26.7
Inadequate	0-12	05	16.7	22	73.30

Table 3: Comparison the Pre-test and post-test level of knowledge regarding Polycystic Ovarian Disease (PCOD) among adolescent girls in experimental group.

N=30

Test	Mean	SD	MD	t-value	df	P-value
Pretest	10.33	2.591	+9.667	+ 9.811	29	.001*
Posttest	20.00	4.807				

*Significant at the level of 0.05

Table: 4: Comparison the Pre-test and post-test level of knowledge score regarding Polycystic Ovarian Disease (PCOD)among adolescent girls in control group.

N=30

Test	Mean	SD	MD	t-value	df	P-value
Pretest	10.07	2.815	+0.700	+1.019	29	316NS
Posttest	9.37	2.906				

*Significant at the level of 0.05

Table 4 depicts that in control group pre-test the mean ±SD for the knowledge of adolescent girls were 10.7±2.815 and post-test the mean ± SD for knowledge of adolescent girls were 9.37 ± 2.906. The difference pre-test and post-test knowledge score of control group was statistically non significant at the level of 0.05.05.

DISCUSSION

The finding of the study revealed that in Pre-test 6(20.0%) of the adolescent girls had adequate knowledge, 24(80.0) had inadequate knowledge in control group. In experimental group Pre-test knowledge score 7(23.3%) adolescent girls had adequate knowledge 23(76.7%) had inadequate knowledge score. The findings are supported by **"Sheela W, Mrs. Lissa J, Saraswathi K (2017)**[7] conducted study to assess the effectiveness of structured teaching programme on knowledge regarding polycystic ovarian syndrome among adolescent girls. In the present study, the pre test finding showed that most of adolescent girls 51 (85%) are having average knowledge, 5 (8.3%) are having poor knowledge and 4 (6.6%) are having good knowledge regarding PCOD. The post-test findings showed that majority of the adolescent girls 46 (76.6%) have average knowledge and 14 (23.3%) are having good knowledge regarding PCOD and none of them have poor knowledge.

The finding of study revealed the Post-test of 8 (26.7%) adolescent girls had adequate knowledge, 22 (73.3%) had inadequate knowledge in control group. In experimental group 25(83.3%) of adolescent girls had adequate knowledge, 5(16.7%) had inadequate knowledge. The finding are supported by **"john S (2021)**[8] conducted a quasi-experimental study to assess the effectiveness of structured teaching programme on knowledge regarding polycystic ovarian disease among adolescent girls. The finding in present study revealed that a majority (90.0%) 54 had inadequate knowledge, 10.0% (6) had moderate knowledge and none of them had adequate knowledge STP. But a majority 80.0% (48) had a adequate knowledge, 20.0% (12) Had moderate knowledge and none of them had inadequate knowledge after STP. Structured teaching programme was significantly effective in increasing the knowledge of polycystic ovarian disease.

The finding of present the study revealed that in control group pre-test the mean ± SD for the knowledge of adolescent girls were 10.7 ± 2.815 and post-test the mean ± SD for knowledge of adolescent girls were 9.37 ± 2.906. The difference pre-test and post-test knowledge score of control group was statistically non significant at 0.05 In experimental group the mean and standard deviation for knowledge of adolescent girls was 9.37 ± 2.906 in pre-test and post-test respectively. The difference between the pre-test and post-test mean knowledge 0.700 was significant at 0.05. These findings are

supported by **Kalpna SP (2013)**[9] findings related to effectiveness of structured teaching programme on knowledge regarding polycystic ovaries among pre-university students depicts that, enhancement between the pre-test and post-test was 19.75 and obtained Paired 't' test value was 7.49, it was highly significant at level <0.05. Thus the structured teaching programme was effective in improving regarding polycystic ovarian disease.

The finding of present study revealed that for knowledge of adolescent girls according to age, educational status, religion, residence, dietary pattern, previous knowledge regarding PCOD, any family member suffer from PCOD, Source of information calculated at p <0.05. It was concluded by chi-square test that there was no significant relationship between the knowledge of adolescent girls with their demographic variables at p<0.05 level. **"Swapnil G & Mohini S (2019)**[10s] conducted a quasi-experimental study to assess the effectiveness of structured teaching programme (STP) on knowledge regarding polycystic ovarian disease. There is no significant association between knowledge and course, knowledge and gender, knowledge and marital status such as p value was (p>0.05). Structured teaching programme is very effective in improving knowledge.

CONCLUSION

Adolescent girls in the control and experimental groups were tested with the pretest and posttest knowledge of polycystic ovarian disease (PCOD). Researcher found that an adolescent understanding of Polycystic Ovarian Disease (PCOD) was high in the experimental group after a structured teaching programme. Adolescent girls' awareness of PCOD was not correlated with their demographic factors, such as age (in years), education, religious affiliation, and eating habit.

Conflicts of Interest: Nil

Source of funding: Self

Ethical Clearance: Written permission from ethical committee of college and thereafter written permission from principal of selected schools were taken. After this, verbal informed consent was taken from every adolescent girls who was included in study.

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