Effectiveness of Planned Teaching Programme [P.T.P] on Knowledge Regarding Polycystic Ovarian Syndrome [PCOS] among Adolescent Girls Ofinter Colleges of Haridwar Uttarakhand

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ABSTRACT

Introduction – Polycystic ovarian syndrome is a common health problem which is increasing in adolescent girls and young women during reproductive years. The term polycystic means many cysts and polycystic ovarian syndrome gets its name because of clusters of small, pearls size cysts in ovaries. It is a complex heterogeneous disorder affecting female endocrine classification with undecided etiology. It affects about 5 to 10% of the female population between the age group of 12 to 45 years and is thought to be one of the most important causes of infertility. The aim of the study was to assess the level of knowledge regarding Polycystic Ovarian Syndrome among Adolescent girls. Also to seek the effectiveness of Planned Teaching Programme regarding Polycystic Ovarian Syndrome among Adolescent girls. Conceptual framework was based Shuffle Beam's CIPP modified programme evaluation model.

Method of data collection procedure: Quantitative research approach and Pre-experimental one group pre test post test design was adopted for this study. The study was conducted in various Inter Colleges of Haridwar, Uttarakhand. The sample size was 105 adolescent girls. The purposive sampling technique was used. Data was collected from the adolescent girls to assess the level of knowledge among the adolescent girls by using structured questionnaire before and after Planned Teaching Programme. The collected data were tabulated and analyzed by descriptive and inferential statistics.

Results: Planned teaching programme was effective for adolescent girls according to the level of knowledge before and after the manipulation. The obtained Z-test value (26.86) was statistically highly significant at $p < 0.05$ levels.

Conclusion: This study shown that Planned Teaching Programme had a significant effect in improving knowledge of adolescent girls.

KEYWORDS: *Knowledge Regarding Polycystic Ovarian Syndrome, Adolescent Girls, Planned Teaching Programme*

INTRODUCTION

The adolescence period of life has specific health needs and comes with the rights of adolescents. According to World Health Organization (WHO) defines adolescent's aged between 10 to 19 years. With the development of growth, there are many mental & physical challenges. The changes occur at the physical, psychological, social and neuro developmental levels. Amenorrhea associated with polycystic ovaries" was first described in the year 1935 by Irving Freiler Stein and Michael Leventhal in

their publication. It is a complex heterogeneous disorder affecting female endocrine classification with undecided aetiology.

Every 10th percentage of the female population is suffering from PCOS and the symptoms can be commonly seen among reproductive age. The incidence of Polycystic Ovarian Syndrome is more among adolescents suffering from physical and psychological morbidity. PCOS seems to run in families, too, so if someone in the family has it, they might be more likely to develop it. PCOS suffering women are at high risk for pregnancy and delivery complications, early diagnosis and interventions can help the women to get the treatments at the earliest. Future prospective requires longer and larger trials to draw stronger conclusions about the effects of lifestyle modifications on PCOS outcomes, to determine optimal weight loss for all these clinical improvements, and to establish the possible effects also in lean PCOS patients.

India already has the highest number of patients with type 2 diabetes mellitus globally and the rapid rise of the incidence of obesity in children is the prime reason for increasing insulin resistance, metabolic syndrome, dyslipidemia and polycystic ovarian syndrome. The prevalence of PCOS is not known by exact numbers. Although the prevalence in Asian countries has a lower prevalence of 2.4%. Prevalence was found to be 6.8% in north Indian women. Similar reports were observed in a survey on 728 women wherein the prevalence was 8.7% according to NIH criteria and 17.8% according to Rotterdam criteria.

Awareness and accurate diagnosis is the first step in managing Polycystic Ovarian Syndrome as it improves the quality of life of the patient. The study conducted on 200 girls showed that they had normal BMI, 19.5% were overweight, 16.5% were obese and 13% were underweight. 33.5% of females had acne, 16% had irregularity of menses, 5% had hirsutism while 2% had infertility, 33% of adolescent and young girls had information about PCOS from teachers.

A study conducted in a government school in Sambalpur, Odisha revealed that 12% of the subject were found to have hirsutism, 20% had extreme acne, and 36% had menstrual irregularity. 78% of the student never heard of Polycystic Ovarian Syndrome before. Descriptive survey research revealed 92% of samples had a regular menstrual cycle. 76% of the samples had average knowledge regarding polycystic ovarian syndrome.

Unfortunately, this disorder often goes undiagnosed because of its many baffling and seemingly unrelated symptoms. The highest reported prevalence of PCO is 52% among South Asian Women. In the past few years, India is witnessing a 30% rise in polycystic ovarian syndrome cases. Lack of knowledge and lifestyle changes are considered to be the major factor leading to this phenomenon. There is a need to increase awareness among women to avoid major causes of fertility problems in the future.
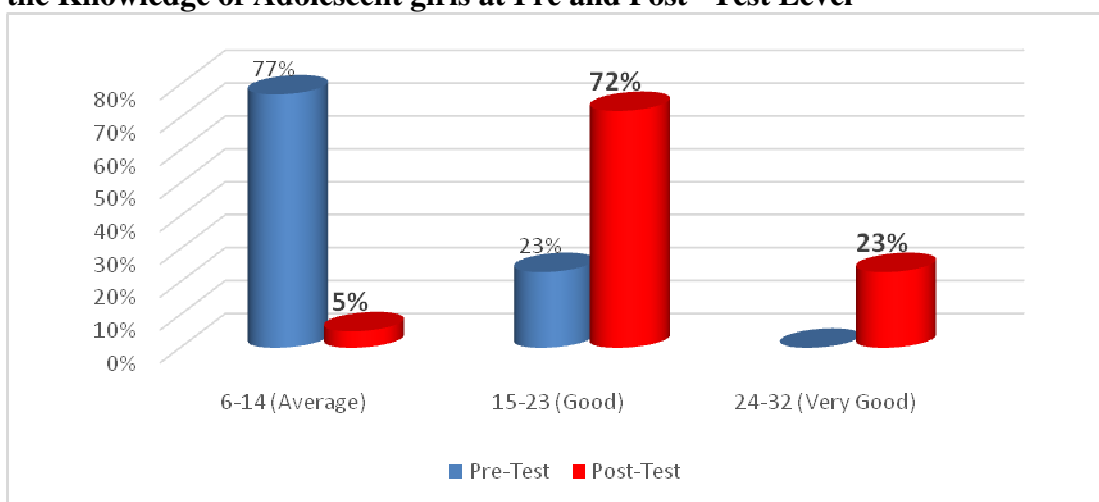
Methods

A quantitative Pre-experimental one group pre-test post-test design was used. The study was conducted in various Inter Colleges Haridwar, (Uttrakhand)Total of 105 adolescent girls who fulfilled the inclusion criteria was included in the study. A systematic random sampling technique was used to select the samples. In the class of 60 students, every Kth Participant was selected to be a part of the study. Girls between the age group of 14 to 19years, whose parents gave written consent were selected for Pretest and Intervention on the same day. The tools used were Socio-demographic variables and a knowledge questionnaire which was developed by the researcher and was validated by the experts in the field. The reliability of the tool was r=0.9. The post-test was taken on the 15th day of Post-intervention.

Results

Socio-Demographic characteristics of Adolescent Girls

Table no 1: Frequency distribution of their socio-demographic variables

n-105

S. N	Demographic Data		Frequency	Percentage
1.	**Age (in years)** **a) 14-16**		**79**	**75%**
	b) 17-19		26	25%
2.	**Education Status** **a) 11th**		**75**	**72%**
	b) 12th		30	28%
3.	**Religion** **a) Hindu**		**94**	**90%**
	b) Muslim		11	10%

4.	**Residence** a) **Urban** b) Rural	**61** 44	**58%** 42%
5.	**Type of family** a) Nuclear b) **Joint**	44 **61**	42% **58%**
7.	**Any family member suffers from polycystic ovaries** a) **No**	**105**	**100%**
8.	**Previous Knowledge** a) No	**105**	**100%**

Table 1 depicts the socio-demographic variable of the study participants where (75%) of the participants were between the age group 14 – 16 years, one-fourth (28%) of participants were studying in the 12th class. The majority (90%) were from a Hindu religious background. The living area was equally distributed (58%) Urban & (42%) Rural. The same applied to the Nuclear and Joint family. No participants had a family history of Polycystic Ovarian Syndrome or any previous knowledge about the disease.

Percentile the Knowledge of Adolescent girls at Pre and Post– Test Level

Graph no 1: The graph shows the percentage-wise distribution of level of Knowledge according to arbitrary at pre-test level. The graph shows a decline in post-test average knowledge (5%) and a steep hike of 49 % in the Post percentage of good knowledge (72%). The level of Knowledge was also increased at a very good level.

Effectiveness of Planned Teaching Programme among Adolescent girls

Table no 2 Mean±Standard Deviation, Mean difference with Z-test calculation

Knowledge Score	Mean ± SD	Mean difference	Z Test Calculated value
Pre- Test group	12.23± 2.890	8.07	**26.86***
Post-Test Group	20.3± 3.769		

t value – 1.6602, Highly Significant *

Table 2 illustrates the effectiveness of PTP on the level of Knowledge. Where mean posttest scores (20.3± 3.769) were greater than the mean pretest scores (12.23± 2.890). The table value is lesser than the calculated value (26.86). Therefore it could be inferred that the PTP was statistically found significantly effective in improving the knowledge of the participants regarding PCOS.

Table 3: Association between Pre -test levels of knowledge score with Selected demographic variable

S. N	Demographic Data	Below Median	At Above Median	Df	Calculated Value	Tabulated Value
1.	**Age In The Year** a) 14-16 b) 17-19	31 10	48 16	1	0.944#	3.84
2.	**Education Status** a) 11th b) 12th	29 12	46 18	1	0.016#	3.84

3.	**Religion** a) Hindu b) Muslim	35 6	59 5	1	0.265#	3.84
4.	**Residence** a) Urban b) Rural	22 19	39 25	1	0.460#	3.84
5.	**Type of family** a) Nuclear b) Joint	20 38	24 23	1	2.932#	3.84

<div align="center">Chi#, Yates@, level of Significance,</div>

Table 3depictsno statistical significant association between level of knowledge with selected demographic variables.

Discussion

The first objective of the study was to assess the pre-test and post-test level of knowledge regarding Polycystic Ovarian Syndrome among adolescent girls. The study findings revealed that among 105 adolescent girls Majority 81(77%) of adolescent girls had average knowledge and24 (23%) had good the level knowledge. This result is cotraidicated by, Patel Jaya, Rai Shailesh&Haq Noman et al., which showed that among 400 participants, only 41% of the women were aware of the term PCOS. The study concluded that most of the inadequate knowledge of participations. universities of Quetta among science 500 female students. The study results revealed that 374 (72.5%) respondents were not aware of PCOS.

The second objective was to assess the effectiveness of Planned Teaching Programme on level of knowledge where the findings summarized that the Planned Teaching Programme had significant beneficial effect. The post test mean score (20.30) was high when compared to pretest mean score (12.23) scores of knowledge. These result were supported by, B.Tamilarasi, V.Vathana, WahaneMs. Sachi, et.al., The studies concluded that there was an increase in the level of knowledge after providing structured teaching programme based on statistical findings.

Limitation

PCOS was less kown and more prone amogyoug adults. The limitation was small sample size which would hinder the generalization of the study findings.

Recommendations

Regular screening of young females at frequent intervals will assess the females and very early stages, helping health care workers to treat the symptoms.

The studies could be beneficial with other non invasive treatment modalities to help young females from PCOS.

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