

**A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED LEARNING PROGRAM ON KNOWLEDGE REGARDING POLYCYSTICOVARIAN SYNDROME AMONG ADOLESCENT GIRLS IN SELECTED HOSPITALS OF MORADABAD, (U.P)**

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**ABSTRACT**

*Polycystic ovary syndrome(PCOs)is a condition which can affect a women menstrual cycle, fertility ,hormones and aspects of her appearance. Polycystic ovaries are slightly larger than normal ovaries and have twice the number of follicles(small cysts).Data were collected from the adolescent girls to assess the level of knowledge among the adolescent girls by using semi structured questionnaire before and after STP. The collected data were tabulated and analyzed by descriptive and inferential statistics. STP was effective for adolescent girls according to the level of knowledge before and after the manipulation. The obtained t- value (44.7) was statistically highly significant at 0.05 levels..*

**Keywords:** PCOS, STP, Adolescent , Girl

## INTRODUCTION

During adolescent period the individual becomes capable of reproduction. The adolescent is prone to suffer from medical and health problem peculiar to this age period. Polycystic ovary syndrome is an endocrine disorder that affects women of reproductive age and is a leading cause of infertility. The causes are unknown, insulin resistance, diabetes, and obesity are all strongly correlated with polycystic ovarian syndrome.

## RESEARCH PROBLEM STATEMENT

A study to assess the effectiveness of structured learning Programme on knowledge regarding polycystic ovarian syndrome among adolescent girls in selected Hospital of Moradabad, U.P.

## OBJECTIVES

- 1.To assess the knowledge regarding polycystic ovarian syndrome among adolescent girls in selected Hospitals of Moradabad, U.P.
- 2.To evaluate the effectiveness of structured teaching program on knowledge regarding polycystic ovarian syndrome among adolescent girls in selected Hospitals of Moradabad, U.P.
- 3.To find out the association between pre-test knowledge score with their selected demographic variables.

Hypotheses- H1:There is a significant difference between pre test and post test knowledge regarding polycystic ovarian syndrome among adolescent girls.

H2:There is a significant association between pretest knowledge with their selected demographic variables.

## METHODOLOGY

### Research design

A quasi experimental design one group pre test and post test design was used to determine the effectiveness of structured teaching programme on knowledge regarding polycystic ovarian syndrome among adolescence girls. The study was conducted at selected Hospital at Moradabad, U.P, the target population is adolescent girls.

In this study, Sample consists of 100 adolescents girls of selected hospital at Moradabad, In this study, simple random sampling technique was used to select the sample. Sample size calculation by  $n = N/(1 + Ne^2)$

## Description of the tool

The tool for data collection had 3 sections – section A, B, C.

Section A: Demographic Performance consisted of adolescents age, religion, types of family, mothers educational status, mothers occupational status, area of residence, Socio economic status, source of information, previous knowledge.

Section B: it comprised of structured knowledge questionnaire to assess the adolescent girls knowledge regarding polycystic ovarian syndrome. It consists of 32 multiple choice questions. The subjects were instructed to tick mark ( ) on the space provided towards the correct response. A score value of “one” was allotted to each correct response; „zero“ was reviewed for the wrong response. The scoring was done by just counting the correct response and according to the total score obtained. The highest possible score was 30.

## Data collection procedure

The investigator obtained ethical clearance and formal permission from the Selected Hospitals at Moradabad, to collect data for the main study. Data was collected from The steps used for data collection were as follows:

1. The investigator introduced about her and explained the purpose of the study to the Selected Hospitals at Moradabad.
2. The investigator after taking official permission from the principal, consent was obtained from the participants to involve in the study.
3. The subjects were assured anonymity and confidentiality of information provided by them and written informed consent has been obtained.
4. The pre test was conducted to assess the knowledge polycystic ovarian syndrome, through structured knowledge questionnaire. Structured teaching programme was administered at the end of the pre test.
5. The post test of the study was carried out 7 days after the administration of structured teaching programme by using the same tool. Data collected was analyzed and tabulated. (44)

## Plan for data analysis

The data analysis and interpretation was planned to include descriptive and inferential statistics.

Descriptive statistics: Percentage, mean, median and standard deviation was used to explain demographic

variables and compute pre-test and post- test knowledge scores.

Inferential statistics: Parametric test:

Paired t test was used to assess the effectiveness of STP with compare pre- test and post-test knowledge scores. Non-parametric test: Chi-square ( $\chi^2$ ) test was used to study the association between pre-test and post-test knowledge scores with selected demographic variables. The significant findings are expressed in form of tables and figures.

### ORGANISATION OF FINDINGS

The data collected is presented under the following headings:

Section A: Findings related to description of demographic variables of Adolescent girls

Section B: Findings related to knowledge of adolescents girls regarding polycystic ovarian syndrome. 29

Section D Findings related to effectiveness of structured teaching program by comparing pre test and post test knowledge scores regarding polycystic ovarian syndrome

Section E: Association between pre test knowledge of adolescent girls regarding polycystic ovarian syndrome with their demographic variables of the respondents

Section A Description of demographic variables of Adolescent girls

**Table – 1 Frequency and percentage distribution of adolescents according to demographic variables.** n= 100

SN	Demographic variables.	F	%	
1	Age in years	18 - 20 Years	65	65
		21– 23years	35	35
2	Religion	Hindu	86	86
		Muslim	14	14
		Christian	Nil	Nil
3	Mothers educational status	No formal education	15	15
		Primary	27	27
		Secondary	35	35
		Graduate and above	23	23
4	Mother's	Housewife	53	53
		Daily Waives	16	16

	Occupational status	Government employee	9	9
		Private employee	22	22
5	Types of family	Nuclear	89	89
		Joint	11	11
6	Area of residence	Rural	26	26
		Urban	74	74
7	Socio economic status	Lower class family	26	26
		Middleclass family	43	43
		Upper class family	31	31
8	Dietary pattern	Vegetarian	33	33
		Non Vegetarian	67	67

**Table-2 Description of adolescents according to their selected obstetric variables**

SN	Obstetric Variables	Adolescents girls		
		F	%	
1	Age of menarche	Below 13 years	15	15
		13 to 15 years	85	85
2	Duration of menstruation	3– 5 days	82	82
		Above 5 days	18	18
3	Cycle of menstruation	Less than 21 days	7	7
		21 to 35 days	83	83
		More than 35 days	10	10
4	Bleeding	Normal	57	57
		No bleeding	Nil	Nil
		Mild bleeding	28	28
		Severe bleeding	15	15
5	Number of pads used in a day	1 -3 pads	35	35
		4- 6 pads	43	43
		More than 6 pads	22	22

Table-2 predicts that, Regarding Age at menarche 85% were belong to 13– 15 yrs, 15% were belongs to below 13 years. Regarding duration of menstruation majority of the girls 82% had to 3 – 5 days and 18

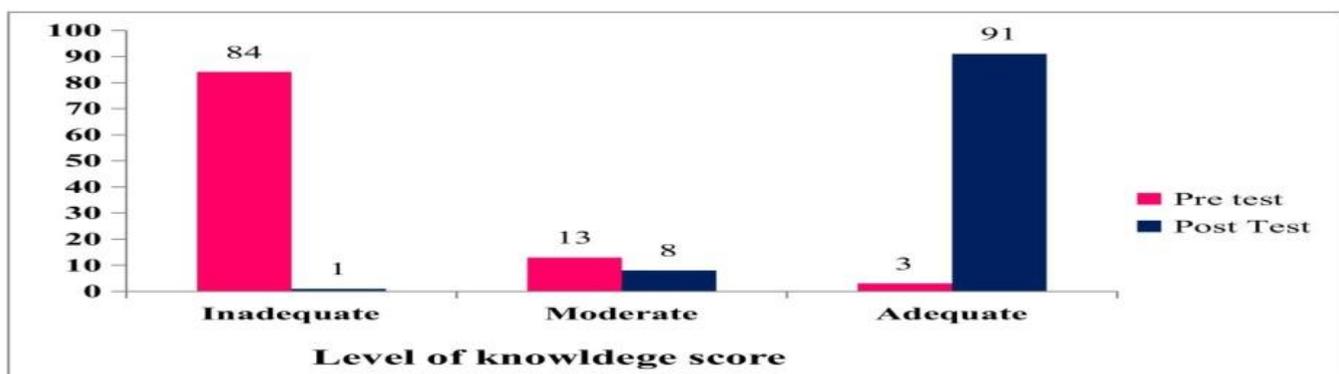
% had above 5 days. Regarding Cycle of menstruation of majority of girls 83% were in duration of 21 to 35 days. 10% were in more than 35 days and 7% were in Morethan35days. Regarding bleeding 57% was normal bleeding, 26% was mildbleeding,15% was to severe bleeding and no one belongs to no bleeding in during menstruation. Regarding number of pads used in during menstruation, majority of girls 43% used 4 – 6 pads followed by 35 % used1-3 pads and 22% used more than 6 pads every month during menstruation

**SECTION–B LEVEL OF KNOWLEDGE IN PRE TEST AND POST TEST REGARDING POLYCYSTIC OVARIAN SYNDROME**

**Table no 3:frequency and percentage distribution in girls according to level of Knowledge in pretest and posttest** n=100

Level of Knowledge	Range	Pre test		Post test	
		f	%	f	%
Inadequate	0 - 10	84	84	1	1
Moderate	11- 21	13	13	8	8
Adequate	22 –32	3	3	91	91

Table-3 depicts that, the pretest and posttest level of knowledge. Majority 84% of adolescent had inadequate knowledge, 13% had moderate knowledge followed by 3 % had adequate knowledge in pretest but in the posttest majority91 % of adolescents had adequate Knowledge and 8% had moderate knowledge followed by 1% were in inadequate knowledge level



**Figure7: level of knowledge in pretest and post test among adolescents girls**

**Tableno:4 Mean And Standard Deviation Of Pre Test And Posttest Knowledge Score.**

Test	Mean	Mean difference	Standard deviation
Pretest	11.92	13.42	2.6
Post test	25.34		1.87

Table: 4 exhibited overall mean pre test knowledge score and standard deviation of students were 11.92 and 2.6 respectively and overall mean post test knowledge score and standard deviation of students were 25.34 and 1.87 respectively.(51)

#### SECTION-C EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME

Comparison of knowledge scores in pretest and posttest

To compare mean knowledge score in pre test and post test, the paired “t” test was used. In order to test the statistical significance, following the hypothesis was stated. H1: There was significant difference between mean knowledge score in pre test and post regarding Polycystic Ovarian Syndrome among adolescent’s girls.

**Tableno:5 Mean, standard deviation and Paired t test of knowledge score in pre test and post test.**

Test	Mean	Standard deviation	Paired t test	significance
Pre test	11.92	2.6	44.7	S*
Post test	25.34	1.87		

SECTION–IV Association of pretest knowledge score of adolescent girl with their selected demographic variables

**Table6-Association of knowledge level of adolescent girl with their selected demographic variables**

n=100

SN	Demographic variables.		f	Chi-square	Inference
1	Age in years	18-20Years	65	0.48	NS
		21–23years	35		
2	Types of family	Nuclear	89	6.34	S*
		Joint	11		
3	Area of residence	Rural	26	5.13	S*
		Urban	74		
4	Source of Information	Health personnel	3	5.87	NS
		Friends/parents	3		
		Mass media	1		
		No information	93		

p<0.05 S\*- Significant

The table no: 5 indicate that the pre test mean knowledge score was 11.92 and standard deviation 2.6 followed by post test mean knowledge score was 25.34 and standard deviation 1.87 was obtained. The paired t test knowledge score in pre test and post test 44.7 was obtained. It shows that there was difference between pre test and post test knowledge score to be extremely considered statistically significant at level of  $p < 0.05$ . However the result revealed that the overall mean score of post-test knowledge was more compared to the mean score of the pre-test knowledge. Hence it is observed that STP was highly effective in enhancing the knowledge of adolescents girls regarding polycystic ovarian syndrome.

**MAJOR FINDINGS OF THE STUDY**

- Among 100 adolescent girls, majority 65% belonged to age group 18–20 years, followed by 35% in 21–24 years.
- With regard to religion, majority 86% were Hindus, 14% were Muslims and none Christians.
- Regarding mothers’ educational status: 15% had no formal education, 27% had primary school education, 35% had secondary school and 23% had undergraduate and above.
- Regarding mothers’ occupation: majority were 53% housewives, 16% daily wages, 22% private employees and 9% government employees.

- With regard to type of family: 89% nuclear and 11% joint families.
- Distribution by economic status: 43% middle class, 31% upper class, 26% lower class.
- With regard to area of residence: 26% rural, 74% urban.
- With regard to source of information: 93% had no previous information, 3% from health professionals and friends, 1% from mass media.
- Regarding age at menarche: 85% between 13–15 years, 15% below 13 years.
- Regarding duration of menstruation: 82% had 3–5 days, 18% had above 5 days.
- Regarding cycle duration: 83% were in duration 21–35 days, 10% more than 35 days, 7% irregular more than 35 days.
- Regarding bleeding: 57% normal bleeding, 26% mild bleeding, 15% severe bleeding, none with no bleeding.
- Regarding number of pads used: 43% used 4–6 pads, 35% used 1–3 pads, 22% used more than 6 pads during menstruation.
- Pretest knowledge: 84% inadequate, 13% moderate, 3% adequate.
- Posttest knowledge: 91% adequate, 8% moderate, 1% inadequate.
- Pretest mean knowledge score = 11.92, SD = 2.6.
- Posttest mean knowledge score = 25.34, SD = 1.87.
- Paired t-test value = 44.7, significant at  $p < 0.05$ . Shows STP highly effective in enhancing knowledge regarding PCOS.
- Association with demographic variables:
  - Type of family:  $\chi^2 = 6.34$  (df 1), significant at 0.05 level.
  - Area of residence:  $\chi^2 = 5.13$  (df 1), significant at 0.05 level.
- Hence, hypothesis H2 accepted.

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