

A Study to Evaluate the Effectiveness of Structured Teaching Programme on Knowledge Regarding PCOS among Adolescent Girls Studying at Diploma College Bagalkot

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Abstract

Original Research Article

This chapter deals with the statement of the problem, objectives, operational definitions, assumptions, hypothesis, variables, and conceptual framework of the study. Poly cystic ovarian syndrome is one of the leading endocrine disorders among women. It affects one in 15 women in worldwide. The incidence of PCOS among adolescents is increasing significantly due to life style changes, endocrine diseases etc. The study aimed to evaluate the effectiveness of structured teaching program on PCOS among Nursing students. A Pre experimental research design, one shot case method was adopted for this study. The sample size was 50 and the samples were selected by using purposive sampling technique. Self-structured questionnaire was used to assess the knowledge regarding polycystic ovarian syndrome. The pretest result showed that out of 50, 2(4%) had adequate knowledge, 25(50%) had moderate knowledge and 46% had inadequate knowledge. A planned teaching program on PCOS was administered to B.Sc Nursing 1st Year students and was evaluated. The post-test findings showed that 14 (28%) had adequate knowledge, 31(62%) had moderate knowledge and 5(10%) had inadequate knowledge regarding polycystic ovarian syndrome. The t-test score was 5.66 ($p < 0.05$). The researcher found that there was significant association between the posttest level of knowledge regarding PCOS and selected demographic variables like Age, Religion, Diet and Area of Residence.

Keywords: Polycystic Ovarian Syndrome, Adolescent girls, Structured teaching program, Knowledge, Effectiveness, Nursing students.

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INTRODUCTION

Adolescence is a transitional phase that turns an amateur child to a responsible adult where a lot of physiological, psychological, and functional growth is witnessed in a human body. An adolescent is any person between 10 and 19 years [1]. Due to the modern lifestyle, PCOS is commonly seen in the adolescent age group. PCOS a heterogeneous syndrome of unknown aetiology is the leading cause of anovulation, hirsutism and infertility in women. This multifactorial syndrome emerges at puberty and has cardiovascular and metabolic sequelae through menopause, menstrual irregularities and insulin resistance, which are common features of normal puberty, obscure the diagnosis of adolescent PCOS, and there are no recognized screening criteria for

PCOS in this age group, 2 PCOS is common diagnoses in women presenting with infertility [2,5].

Objectives:

1. To assess the prevalence of PCOS
2. To assess the level of knowledge regarding PCOS among adolescent girls of diploma college at Bagalkot.
3. To evaluate the effectiveness of structured teaching programme on knowledge regarding PCOS among adolescent girls of diploma college at Bagalkot.

Hypothesis:

H1: There will be a significant difference between mean pre-test and post-test knowledge scores regarding PCOS among adolescent girls at diploma college at Bagalkot.

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RESEARCH METHODOLOGY

➤ Research Approach

Survey research approach is non-experimental research that focuses on obtaining information regarding the activities, beliefs, preferences, and attitudes of people via direct questioning of a sample of respondents. A descriptive survey approach is designed when the purpose of the study was to describe the prevalence or incidence of a phenomenon or to estimate the value of a phenomenon for a population. In the present study the main aim is to assess the level of knowledge regarding PCOS among adolescent girls at diploma college Bagalkot.

➤ Research Design

The term research design refers to the plan of a scientific investigation. Research design help the researcher in selection of subjects, identification of variables, their manipulation and control, observation to be made and types of statistical analysis to interpret the data.

For the present study Descriptive Survey Research design has been adopted.

➤ Variables under the study

Study Variable 1: knowledge of PCOS among adolescent girls.

Study Variable 2: Structured teaching program on knowledge regarding PCOS

Socio-demographic Variables:

Socio-demographic Variables in this study includes Age, religion, residency, educational statuses, occupation status, family monthly income, marital status, type of family Diet, age of PCOS Adolescent girls.

Setting of the Study:

The setting is where the population or the portion of it being studied is located and where the study is carried out. The present study was conducted in diploma college Bagalkot.

Population

A population is complete set of persons or subjects that passes common characteristics that is of interest to the researcher.

The target population for the present study includes adolescent girls who at state of PCOS among adolescent girls studying at diploma college Bagalkot.

The Accessible population for the study is PCOS adolescent girl who are the members of diploma college at Bagalkot.

Sampling Technique: Sampling technique is the process of selecting a portion of the population to obtain data regarding a problem. For the present study simple random sampling technique was adopted.

Data Collection Method

Development of the Tool:

Data collection tools are the instruments used by the researcher to observe or measure the key variables in the research problem (Robert, 1989).

- Review of literature.
- Consultation and discussion with nursing experts, psychologist, psychiatrist.
- Based on the pilot study results.
- The final tool was prepared with the guidance and suggestions of the guide.

Description of the final tool

The final format of the tool was comprised of three parts.

Part-I: The socio-demographic data consists of information about people; Age, religion, residency, education status, occupation status, family monthly income, marital status, type of family, diet, age of PCOS girls.

Part-II: It consists of semi structured questionnaire with the items of 30 to assess the level of knowledge regarding PCOS among adolescent girls at diploma college Bagalkot.

Presentation of data:

To begin with, data was entered in a master sheet for tabulation and statistical processing. The findings were presented under the following headings.

Part-I: Description of sample with their socio demographic variables.

Part-II: Assessment level of knowledge of PCOS among Adolescent girls.

Part-III: Association of the socio-demographic variables of PCOS among adolescent girls at diploma college Bagalkot.

Part- I: Description of sample with their socio demographic variables

Sl. No	Socio demographic factor	Frequency	Percentage
1.	Age	73	60.83%
		41	34.16%
		6	5%
2.	Religion	105	87.5%
		15	12.5%
		0	0
		0	0

3.	Residency	55	45.83%
		65	54.16%
4.	Education of women	0	0%
		0	0%
		87	72.5%
		33	27.5%
5.	Occupation of women	0	0%
		74	61.66%
		46	38.33%
6.	Family monthly income	40	33.33%
		16	13.33%
		38	31.66%
		26	21.66%
7.	Marital status	114	95%
		6	5%
		0	0%
8.	Type of family	80	66.66%
		40	33.33%
		0	0%
9.	Diet	54	45%
		6	5%
		60	50%
10	PCOS patient have to no control over the dieses	58	48.33%
		36	30%
		26	21.66%

Section-A: To evaluate the effectiveness of structure teaching programme on PCOS among adolescent girls.

Categorization of the evaluate the effectiveness of structured teaching on knowledge regarding PCOS among adolescent girls was done as follows: scores 0-9 indicates poor, 10-20 indicates average and 20 and above indicates good.

Table-5.2 Level of knowledge regarding PCOS among adolescent girls. N=120

Knowledge	Range of Score	No of respondents	Percentage
Poor	0-9	73	60.83%
Average	10-20	41	34.16%
Good	20 and above	06	5%
Total		120	100%

Evaluate the effectiveness of structure teaching programme on knowledge regarding PCOS among adolescents' girls reveals that, most of them (60.83%) had poor and remaining (34.16%) of them had very poor, and (5%) had average.

Section-C: Mean, SD and mean percentage of knowledge about PCOS among adolescent girls.

Table-5.4: Area wise mean, SD, and mean percentage of anxiety score. N=120

Area	Maximum Score	Mean	S. D	Mean percentage
Knowledge about PCOS among adolescent girls	30	60.5	0.519402	42.72%

The median, SD and mean percentage of knowledge of PCOS score reveal that, the total mean

percentage of PCOS among adolescent girls was 42.72% with mean and SD 0.519402

Table-5.7: Frequency wise distribution among adolescent girls with their selected socio-demographic variables

Sl. No	Socio-demographic variables	Df	Chi-square value	P value	Level of significance
1.	Age	6	31.17	<0.001	P<0.05 S
2.	Religion	6	4.35	0.6294	P>0.05 S
3.	Residency	4	4.49	0.3437	P>0.05 NS
4.	Education of women	6	3.25	0.7769	P>0.05 NS
5.	Women occupation	6	3.9	0.6902	P>0.05 NS

6.	Family monthly income	6	4.89	0.558	P<0.05	S
7.	Marital status	4	2.03	0.7302	P<0.05	S
8.	Type of family	2	3.46	0.1773	P>0.05	NS
9.	Diet	4	5.64	0.2277	P>0.05	NS
10.	PCOS have to no control over the diseases	4	5.06	0.2812	P<0.05	S

N=120

Df = degrees of freedom NS = Not significant *S=Significant (P < 0.05)

The findings regarding association of the PCOS among adolescent girls with their selected socio-demographic variables shows that, significant association was found between the evaluate the effectiveness of PCOS among adolescent girls about age ($\chi^2 = 31.17$; P<0.05), religion ($\chi^2 = 4.35$; P<0.05), family monthly income ($\chi^2 = 4.89$; P<0.05), marital status ($\chi^2 = 2.03$; P<0.05) and diet ($\chi^2 = 5.64$; P<0.05) (Table-6)

Thus, the H₁stated is accepted for socio-demographic variables age of PCOS among adolescent girls about, religion, family monthly income, marital status and age of menarche rejected for other variables.

DISCUSSION

The present study evaluated the effectiveness of a structured teaching programme on knowledge regarding polycystic ovarian syndrome (PCOS) among adolescent girls and revealed that baseline awareness was largely inadequate [6].

After the intervention, post-test knowledge scores improved significantly ($t = 5.66$, $p < 0.05$), demonstrating the effectiveness of the structured educational programme [1].

These findings are consistent with previous research indicating that adolescents commonly possess limited reproductive health knowledge and that targeted educational interventions can significantly enhance awareness and preventive behavior related to PCOS [2]. Because PCOS frequently begins during adolescence and is associated with menstrual irregularities, metabolic disturbances, and future infertility risk, early health education is considered essential for long-term prevention [3].

The study also identified significant associations between knowledge levels and selected socio-demographic variables such as age, family income, marital status, and diet, suggesting that social and economic context influences adolescent health literacy [1,4]. However, the persistence of only moderate knowledge after the intervention indicates that continuous, curriculum-based education and repeated reinforcement may be necessary for sustained improvement [8].

Overall, the findings confirm that structured teaching programmes are an effective and practical

strategy for improving awareness of PCOS among adolescent girls and support the important role of nursing-led educational interventions in early prevention and reproductive health promotion [2,3].

SUMMARY

This chapter dealt with the analysis and interpretation of the findings of the study. The data gathered were summarized in the master sheet and both descriptive and inferential statistics were used for analysis. The mean, SD, and mean percentage of PCOS Among adolescent girls. reveal that, the total mean percentage of score of adolescent girls was 45.238% with mean and SD 42.72, ± 0.519402 .

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