International Journal of Obstetrics and Gynaecology Nursing

Journal homepage: www.mcmed.us/journal/ijogn

EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON AWARENESS AND ATTITUDE REGARDING EARLY IDENTIFICATION AND MANAGEMENT OF POLYCYSTIC OVARIAN SYNDROME AMONG ADOLESCENT GIRLS IN SELECTED HOSPITAL

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Article Info

Received 20/08/2024; Revised 01/09/2024; Accepted 17/10/2024

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Abstract

The study was conducted by using quasi experimental pre test post test control group design. The total sample size was 60, 30 subjects in control group and 30 subjects in experimental group were selected through non-probability convenience sampling technique. The structured questionnaire was used to assess the level of awareness and the modified attitude scale was used to assess the level of attitude regarding early identification and management of PCOS among adolescent girls. Planned teahing programme to the experimental group. After seven days post test was done by using structured questionnaire and modified attitude scale. The response were analyzed by using descriptive statistics (mean, standard deviation, frequency, percentage) and inferential statistics (paired "t" test, unpaired "t" test and chi-square). Discussions on the findings were arranged based on the objectives and hypothesis..

Keywords: *planned teaching programme, awareness, attitude, early identification, management, polycystic ovarian syndrome*.

INTRODUCTION

Adolescence is a period of transition from childhood to adulthood, a time of physiological, psychological, social and emotional adaptation. Adolescence is one of the most fascinating and complex transition in the life span: a time of accelerated growth and change. A time of expanding horizons, self-discovery, emerging independence and a time of metamorphosis from child to adulthood.

Now a day's adolescence is being attracted to the current technological world and has greater impact on their life style in all aspects. So they need more guidance and care. Specifically, adolescent girls need more consideration in their health because the current gynecological problems are gradually arising and that stem up the girls to pass through their motherhood. Polycystic ovarian syndrome is one of the most growing gynecological and endocrinal problem, which is most common among adolescent girls. It adversely affects their life process and leading them to infertility in later life, thus it prevents them to enjoy their motherhood and cause more stress throughout their life.

Adolescents and young women make up around forty percent of the population of India. The behavioral patterns established during these developmental period

helps to determine the current health status and their risk for developing chronic diseases during adulthood. Early adult is a critical transitional period that includes biological changes of puberty and the need to negotiate key developmental tasks, such as increase independence and normative experimentation. During this period, the body changes and there will be the development of secondary sexual characteristics. Any differences of secondary sex characteristics can inversely affect the physical and emotional adaptation of the adolescent. The leading causes of illness, death among adolescents and young women are largely preventable. Health outcomes for adolescence and early adults are grounded in their social environment and are frequently mediated by their behaviors.

STATEMENT OF THE PROBLEM:

A quasi experimental study to assess the effectiveness of planned teaching programme on awareness and attitude regarding early identification and management of polycystic ovarian syndrome among adolescent girls in selected Hospital.

AIM:

The aim of the study was to effectiveness of planned teaching programme on awareness and attitude regarding early identification and management of polycystic ovarian syndrome.

OBJECTIVES:

1. To assess the level of awareness regarding early identification and management of polycystic ovarian syndrome in experimental and control group.
2. To evaluate the effectiveness of the video assisted teaching programme on awareness and attitude regarding early identification and management of polycystic ovarian syndrome in experimental group.
3. To find out the association between the pretest level of awareness and attitude regarding polycystic ovarian syndrome with their selected demographic variables among adolescent girls in experimental and control group.

HYPOTHESIS:

H1: The mean post test level of awareness and attitude is significantly higher than the mean pretest level of awareness and attitude in experimental group.

H2: The mean post test level of awareness and attitude in experimental group is significantly higher than the mean post test level of awareness and attitude in control group.

H3: There is a significant association between pretest level of awareness and attitude regarding polycystic ovarian syndrome with their selected demographic variables in experimental and control group.

ASSUMPTIONS:

- PCOS is a common problem among women of reproductive age.
- The adolescent girls will not have basic knowledge about PCOS.
- The knowledge and attitude of students will influences their practices on the prevention and management of PCOS.

METHODOLOGY:

The study was conducted by using quasi experimental pre test post test control group design. The total sample size was 60, 30 subjects in control group and 30 subjects in experimental group were selected through non-probability convenience sampling technique. The structured questionnaire was used to assess the level of awareness and the modified attitude scale was used to assess the level of attitude regarding early identification and management of PCOS among adolescent girls. Planned teahing programme to the experimental group. After seven days post test was done by using structured questionnaire and modified attitude scale. The response were analyzed by using descriptive statistics (mean, standard deviation, frequency, percentage) and inferential statistics (paired "t" test, unpaired "t" test and chi-square). Discussions on the findings were arranged based on the objectives and hypothesis.

VARIABLES

Independent variable:

According to Suresh.K.Sharma Independent variables is a stimulus or activity that is manipulated or varied by the researcher to create the effect on the dependent variable. Video assisted teaching programme regarding early identification and management of polycystic ovarian syndrome.

Dependent variable:

According to Suresh k Sharma, the outcome or response due to the effect of the independent variables, which researcher wants to predict or explain. Level of awareness and attitude regarding early identification and management of polycystic ovarian syndrome which was measured by structured questionnaire and modified attitude scale.

DESCRIPTION OF THE TOOL

The tool used for the research study was structured questionnaire regarding early identification and management of polycystic ovarian syndrome which consists of three parts.

PART I: Demographic variables

It includes information regarding age, family income, religion, education of parents, family history of PCOS,

habitant, dietary pattern, previous information about polycystic ovarian syndrome.

PART II: Structured questionnaire to assess the level of awareness regarding early identification and management of PCOS.

SCORING PROCEDURE:

The level of awareness was measured in the terms of knowledge score. A score one (1) was given to every correct response and a score zero was given to wrong responses. The highest possible score was 30 and lowest score was 0.

Table 1: Awareness level was categorized as:

S.NO	LEVEL OF AWARENESS	SCORE	PERCENTAGE
1.	Adequate	23 – 30	76 – 100 %
2.	Moderate	16 – 22	51 – 75 %
3.	Inadequate	0 – 15	0 – 50 %

PART III: Modified attitude scale to assess the level of attitude regarding early identification and management of PCOS.

SCORING PROCEDURE:

The level of attitude was measured by modified attitude scale. It includes statements on attitude regarding PCOS among students. There were totally 20 statements which contain 10 positive and 10 negative statements. Each item was measured on a 5-point likert scale from strongly agree to strongly disagree. The positive item scored as 5,4,3,2,1 and the negative item scored as 1,2,3,4,5. The maximum score for positive item was 50 and the negative item was 10.

Table 2: Attitude level was categorized as:

S.NO	LEVEL OF ATTITUDE	PERCENTAGE
1.	Positive	76 – 100 %
2.	Neutral	51 – 75 %
3.	Negative	0 – 50 %

DATA COLLECTION PROCEDURE:

The data collection procedure was held in 3 phases.

I phase:

Pretest was conducted for both experimental and control group. Demographic data and level of awareness was assessed by using structured knowledge questionnaire (multiple choice questions). Attitude was assessed by using modified attitude scale.

II phase:

Planned teaching program was given to the experimental group. The lecturer cum discussion method for 30 minutes. At the end of the planned teaching program, the investigator discussed and their doubts were clarified.

III phase:

After 7 days, the post test was conducted for both experimental and control group with same structured questionnaire and the modified attitude scale.

Table 3: PLAN FOR DATA COLLECTION:

WEEKS	ACTIVITIES
1-4	Phase I, II & III (pre-test, intervention & post-test)
5 & 6	Data coding, compilation and analysis

RESULTS AND DISCUSSION:

In control group, pretest mean score of awareness was 11.43 ±3.07 the posttest mean score was 12.27±SD 2.65, the mean difference was 0.84. The obtained "t" value was 1.85, which was not statistically significant.

In experimental group, pretest mean score of awareness was 11.70 ±2.48 the posttest mean score was 21.03±SD 1.42, the mean difference was 9.33. The obtained "t" value was 29.90, which was statistically highly significant at p<0.001***level.

In control group posttest mean score of awareness was 12.26±2.65. In experimental group posttest mean score was 21.03±1.42, the mean difference was 8.77. The obtained "t" value was 15.95, which was statistically highly significant at p<0.001***level.

In control group, pretest mean score of attitude was 52.00 ±5.87 the posttest mean score was 53.27±SD 5.48, the mean difference was 1.26. The obtained "t" value was 1.92, which was not statistically significant.

In experimental group, pretest mean score of attitude was 52.83±6.93 the posttest mean score was 73.77±SD 4.94, the mean difference was 20.93. The obtained "t" value was 15.35 which was statistically highly significant at p<0.001***level.

In control group posttest mean score of attitude was 53.27±5.48. In experimental group posttest mean score was 73.77±4.94, the mean difference was 20.50. The

obtained "t" value was 15.20, which was statistically highly significant at p<0.001***level.

The present study findings concluded that, planned teaching programme is effective by improving the awareness and attitude among adolescent girls.

Table 4 Association between pretest level of awareness in experimental group with their selected demographic variables. (n=30)

S.NO	DEMOGRAPHIC VARIABLES	PRETEST LEVEL OF AWARENESS								
		Inadequate		Moderate		Adequate		N	□2 df	P value
		n	%	n	%	n	%			
1	**Age**									
	18 years	14	87.50	2	12.50	0	0	16	6.69 (df=1)	**0.01** (S)**
	19 years	6	42.85	8	57.15	0	0	14		
	20 years	0	0	0	0	0	0	0		
2	**Monthly income of the family(in rupees)**									
	Below 15000	8	57.14	6	42.86	0	0	14		
	15001 to 25000	9	69.23	4	30.77	0	0	13	2.11 (df=2)	0.34 (NS)
	25001 to 50000	3	100	0	0	0	0	3		
	Above 50001	0	0	0	0	0	0	0		
3	**Religion**									
	Hindu	19	67.86	9	32.14	0	0	28	0.26 (df=1)	0.61 (NS)
	Christian	1	50.00	1	50.00	0	0	2		
	Muslim	0	0	0	0	0	0	0		
	Others	0	0	0	0	0	0	0		
4	**Education of parents**									
	Educated	14	60.87	9	39.13	0	0	23	1.49 (df=1)	0.21 (NS)
	Uneducated	6	85.71	1	14.29	0	0	7		
5	**Any family history of PCOS**									
	Yes	2	28.57	5	71.43	0	0	7	5.96 (df=1)	**0.02* (S)**
	No	18	78.26	5	28.57	0	0	23		
6	**Habitant**									
	Rural	17	85.00	3	15.00	0	0	20	9.09 (df=1)	**0.01** (S)**
	Urban	2	28.57	5	71.43	0	0	7		
	Semi urban	1	33.33	2	66.67	0	0	3		
7	**Previous sources of information regarding PCOS ?**									
	Yes	5	83.33	1	16.67	0	0	6	0.93 (df=1)	0.33 (NS)
	No	15	62.50	9	37.50	0	0	24		
8	**Dietary pattern**								0.95 (df=1)	0.32 (NS)
	Vegetarian	3	50.00	3	50.00	0	0	6		
	Non vegetarian	17	70.83	7	29.17	0	0	24		

S-Significant, NS- Non Significant

Table 4 conveys the association between the pretest level of awareness in experimental group with their selected demographic variables. The above findings concludes that there is an association between pretest level of awareness in experimental group with their selected demographic variables such as age (χ**2** =6.69, p=0.01**), family history of PCOS (χ**2** =5.96, p=0.02*), habitant (χ2 =9.09, p=0.01**). Hence the researcher accepts the research hypothesis (H3)

Table 5 Association between pretest level of awareness in control group with their selected demographic variables (n=30)

S.NO	DEMOGRAPHIC VARIABLES	PRETEST LEVEL OF AWARENESS								
		Inadequate		Moderate		Adequate		N	χ2 df	P value
		n	%	n	%	n	%			

1	**Age**								0.04 (df=1)	0.82 (NS)
	18 years	10	71.43	4	28.57	0	0	14		
	19 years	12	75	4	25	0	0	16		
	20 years	0	0	0	0	0	0	0		
2	**Monthly income of the family(in rupees)**								0.83 (df=2)	0.65 (NS)
	Below 15000	9	69.23	4	30.77	0	0	13		
	15001 to 25000	11	73.33	4	26.67	0	0	15		
	25001 to 50000	2	100	0	0	0	0	2		
	Above 50001	0	0	0	0	0	0	0		
3	**Religion**								0.55 (df=1)	0.46 (NS)
	Hindu	19	76	6	24	0	0	25		
	Christian	3	60	2	40	0	0	5		
	Muslim	0	0	0	0	0	0	0		
	Others	0	0	0	0	0	0	0		
4	**Education of parents**								0.34 (df=1)	0.55 (NS)
	Educated	14	70	6	30	0	0	20		
	Uneducated	8	80	2	20	0	0	10		
5	**Any family history of PCOS**								0.83 (df=1)	0.36 (NS)
	Yes	7	63.64	4	36.36	0	0	11		
	No	15	78.95	4	21.05	0	0	19		
6	**Habitant**								2.77 (df=2)	0.25 (NS)
	Rural	15	78.95	4	21.05	0	0	19		
	Urban	6	75	2	25	0	0	8		
	Semi urban	1	33.33	2	66.67	0	0	3		
7	**Previous sources of information regarding PCOS ?**								0.13 (df=1)	0.71 (NS)
	Yes	4	80.00	1	20.00	0	0	5		
	No	18	72.00	7	28.00	0	0	25		
8	**Dietary pattern**								1.22 (df=1)	0.27 (NS)
	Vegetarian	4	57.14	3	42.86	0	0	7		
	Non vegetarian	18	78.26	5	21.74	0	0	23		

NS- Non Significant

Table 5 conveys the association between the pretest level of awareness in control group with their selected demographic variables. The above findings concludes that there is no association between pretest level of awareness in control group with their selected demographic variables.

Table 6 Association between pretest level of attitude in experimental group with their selected demographic variables (n=30)

S.NO	DEMOGRAPHIC VARIABLES	PRETEST LEVEL OF ATTITUDE						N	$\chi 2$ df	P value
		Negative		Neutral		Positive				
		n	%	n	%	n	%			

1	**Age**									
	18 years	6	37.50	10	62.50	0	0	16	5.12 (df=1)	**0.02* (S)**
	19 years	11	78.57	3	21.43	0	0	14		
	20 years	0	0	0	0	0	0	0		
2	**Monthly income of the family(in rupees)**									
	Below 15000	12	85.71	2	14.29	0	0	14		
	15001 to 25000	4	30.17	9	69.83	0	0	13	6.12 (df=2)	**0.05* (S)**
	25001 to 50000	1	33.33	2	66.67	0	0	3		
	Above 50001	0	0	0	0	0	0	0		
3	**Religion**									
	Hindu	17	60.71	11	39.29	0	0	28	1.87 (df=1)	0.17 (NS)
	Christian	0	0	2	100	0	0	2		
	Muslim	0	0	0	0	0	0	0		
	Others	0	0	0	0	0	0	0		
4	**Education of parents**									
	Educated	12	52.17	11	47.83	0	0	23	2.24 (df=1)	0.13 (NS)
	Uneducated	5	71.43	2	28.57	0	0	7		
5	**Any family history of PCOS**									
	Yes	6	85.71	1	14.29	0	0	7	2.24 (df=1)	0.13 (NS)
	No	11	47.83	12	52.17	0	0	23		
6	**Habitant**									
	Rural	15	75.00	5	25.00	0	0	20	8.52 (df=2)	**0.05* (S)**
	Urban	1	14.28	6	85.72	0	0	7		
	Semi urban	1	33.33	2	66.67	0	0	3		
7	**Previous sources of information regarding PCOS ?**									
	Yes	4	66.67	2	33.33	0	0	6	0.17 (df=1)	0.68 (NS)
	No	13	54.17	11	45.83	0	0	24		
8	**Dietary pattern**								0.17 (df=1)	0.68 (NS)
	Vegetarian	3	50	3	50	0	0	6		
	Non vegetarian	14	58.33	10	41.67	0	0	24		

S-Significant, NS-Non Significant

Table 6 conveys the association between the pretest level of attitude in experimental group with their selected demographic variables. The above findings concludes that there is an association between pretest level of attitude in experimental group with their selected demographic variables such as age (χ**2** = 5.12, p=0.02*), monthly income of the family (χ**2** = 6.12, p=0.05*) habitant (χ**2** = 8.52, p=0.05*). Hence the researcher accepts the research hypothesis (H3)

Table 7 Association between pretest level of attitude in control group with their selected demographic variables (n=30)

S.NO	DEMOGRAPHIC VARIABLES	PRETEST LEVEL OF ATTITUDE								
		Negative		Neutral		Positive		N	□**2** df	P value
		n	%	n	%	n	%			
1	**Age**									
	18 years	8	57.14	6	42.86	0	0	14	0.08 (df=1)	0.76 (NS)
	19 years	10	62.50	6	37.50	0	0	16		
	20 years	0	0	0	0	0	0	0		
2	**Monthly income of the family(in rupees)**									
	Below 15000	6	46.15	7	53.85	0	0	13		
	15001 to 25000	10	66.67	5	33.33	0	0	15	2.65 (df=2)	0.27 (NS)
	25001 to 50000	2	100	0	0	0	0	2		
	Above 50001	0	0	0	0	0	0	0		
3	**Religion**									
	Hindu	13	52.00	12	48.00	0	0	25	2.25	

	Christian	5	100	0	0	0	0	5	(df=1)	0.13 (NS)
	Muslim	0	0	0	0	0	0	0		
	Others	0	0	0	0	0	0	0		
4	**Education of parents**									
	Educated	14	70	6	30	0	0	20	2.50 (df=1)	0.11 (NS)
	Uneducated	4	40	6	60	0	0	10		
5	**Any family history of PCOS**									
	Yes	8	72.73	3	27.27	0	0	11	1.17 (df=1)	0.27 (NS)
	No	10	52.63	9	47.37	0	0	19		
6	**Habitant**									
	Rural	10	52.63	9	47.37	0	0	19	2.45 (df=2)	0.29 (NS)
	Urban	5	62.50	3	37.50	0	0	8		
	Semi urban	3	100	0	0	0	0	3		
7	**Previous sources of information regarding PCOS ?**									
	Yes	5	100	0	0	0	0	5	2.25 (df=1)	0.25 (NS)
	No	13	52.00	12	48.00	0	0	25		
8	**Dietary pattern**								0.03 (df=1)	0.03 (NS)
	Vegetarian	4	57.14	3	42.86	0	0	7		
	Non vegetarian	14	60.87	9	39.13	0	0	23		

NS-Non Significant

Table 7 conveys the association between the pretest level of attitude in control group with their selected demographic variables. The above findings concludes that there is no association between pretest level of attitude in control group with their selected demog

CONCLUSION

Polycystic ovarian syndrome is a condition in which the woman has a imbalance of female sex hormones. It may lead to changes in the menstrual cycle, cyst in the ovary, failure to conceive and other health problems. The preventive measures like awareness will help the adolescent girls, to improve their knowledge. In the present study, majority of the adolescent girls had inadequate awareness and negative attitude regarding PCOS in pre test. After the video teaching program, the level of awareness and attitude has increased significantly in experimental group. The findings indicate that, video teaching program is an effective intervention in improving the level of awareness and attitude regarding PCOS. Video teaching program is found to be affordable, comfortable and effective. After the completion of the study, subjects in the control group were taught regarding early identification and management of PCOS.

REFERENCES

1. Attaran, M. (2020). Polycystic ovarian syndrome. *Cleveland Clinic* Website. Retrieved from https://www.clevelandclinicmeded.com/medicalpubs/diseasemanagement/
2. Boschert, S. (2019). Some PCOS treatments decrease cardiovascular risk. *MD Consult* website. Retrieved from https://www.mdconsult.com/das/news/body/
3. Brassard, M., AniMelk, Y., & Baillargeon, J. P. (2018). Basic infertility including polycystic ovarian syndrome. *Medical Clinics of North America*, 92(5), 1163-1192. Retrieved from https://www.mdconsult.com/das/article/body
4. Donavalli, S., & Ehrman, D. A. (2017). Pharmacologic therapy for polycystic ovary syndrome. *Clinical Obstetrics and Gynecology*, 50(1), 244-254.
5. Ferry, R. J. (2020). Polycystic ovarian syndrome. *eMedicine* website. Retrieved from https://emedicine.medscape.com/article/924698-overview
6. Khan, M. I. (2020). Polycystic ovarian syndrome. *eMedicine* website. Retrieved from https://emedicine.medscape.com/article/2568606-overview
7. Magnotti, M., & Futterweit, W. (2017). Obesity and polycystic ovarian syndrome. *Medical Clinics of North America*, 91(6), 1151-1168. Retrieved from https://www.mdconsult.com/das/article/body
8. Marrinan, G., & Stein, M. (2019). Polycystic ovarian disease (Stein-Leventhal syndrome). *eMedicine* website. Retrieved from https://emedicine.medscape.com/article/404754-overview
9. Meyer, C., McGrath, B. P., & Teede, H. J. (2020). Overweight women with polycystic ovarian syndrome have evidence of subclinical cardiovascular diseases. *Journal of Clinical Endocrinology & Metabolism*, 90(10), 5711-5716.
10. Nader, S. (2019). Treatment for polycystic ovarian syndrome: A critical appraisal of treatment options. *Medscape* website. Retrieved from https://www.medscape.com/viewarticle/576132

11. O'Brien, R. F., & Emans, S. J. (2018). Polycystic ovarian syndrome in adolescents. *Journal of Pediatric and Adolescent Gynecology*, 21(3), 119-128.