Assess the Effectiveness of Videoassisted Teaching Regarding Life Style Modification on Knowledge and Practice Amongpatients with PCOD at Srmgeneral Hospital, Kattankulathur

CrossMark

Dr. Abirami .P
Associate Professor, SRM College of Nursing, Kattankulathur

Abstract:

Women with polycystic ovarian syndrome have chronic anovulation and androgen excess not attributable to another cause. This condition occurs in approximately 4% of women. The main aim of the study is to assess the effectiveness of video assisted teaching regarding lifestyle modification on knowledge and practice among patients with PCOD at SRM General Hospital Kattankulathur. One group pretest post-test, experimental research design was adopted for the present study. The sample size was 50 and non-probability purposive sampling technique was used for selecting the samples. The tool used for the study comprises of 2 sections. Section a Demographic Data, Section B- Structured questionnaire developed by the investigator which includes 30 questions to assess the knowledge and practice on life style modification regarding PCOD. The study was conducted at SRM General Hospital, kancheepuram district the data was analyzed and interpreted based on the objectives using descriptive and inferential Statistics. The result revealed that with respect to knowledge the mean value 10.66 with SD 3.47of pre-test and the mean value of 20.700 with SD 3.1 5 of post-test projects ‗t' value as 35.69 which is Statistically significant at P = 0.001 level, with respect to practice the mean value 10.34 with SD 3.77 of pre-test and the mean value of 21.28 with SD 3.85 of post-test projects ‗t' value as 34.44 which is statistically significant at P=0.001 level. Pearson's correlation was r=0.6 which was statistically significant at P=0.001 for knowledge and practice on life style modification. Regarding the association ,there was a significant association found between the knowledge on life style modification among patients with PCOD after video assisted teaching and the demographic variables like Age, Educational status, Occupation, Area of residence and monthly income

Keywords: Effectiveness, Video assisted teaching, Knowledge, Practice, Polycystic ovary syndrome.

Introduction

PCOS appears to be an ancient disorder, which persisted in human evolution despite reduced fecundity because of benefits to affected women such as greater sturdiness and improved energy utilization, a rearing advantage for their children and kin, and a reduction in the risk of perinatal mortality. This raises the possibility that gene variants eventually found to be associated with PCOS will be similar across ethnic groups and races.[1]

Currently, PCOS is considered a polygenic trait that might result from the interaction of susceptible and protective genomic variants and environmental factors, during either prenatal or postnatal life.

The major features of polycystic ovarian syndrome (PCOS) include menstrual dysfunction, anovulation, and signs of hyperandrogenism.[2]

PCOS can result from abnormal function of the hypothalamic-pituitary-ovarian (HPO) axis. A key characteristic of PCOS is inappropriate gonadotropin secretion, which is more likely a result of, rather than a cause of, ovarian dysfunction. In addition, one of the most consistent biochemical features of PCOS is a raised plasma testosterone level.[3]

Stein and Leventhal were the first to recognize an association between the presence of polycystic ovaries and signs of hirsutism and amenorrhea[4]

In women of Indian subcontinent, prevalence rates of PCOS are as high as 50% have been detected. It is responsible for 18% of infertility and 40% of hirsutism cases in a study conducted at Srinagar. Metabolic syndrome was diagnosed in 46% women's with PCOS in a study done in Kolkata. Women diagnosed as having PCOS before pregnancy have an increased risk of developing gestational diabetes. PCOS

is a genetic disorder that each child has a 50% of inheriting the disorder from a parent who carries the gene.[5]

A meta-analysis found a twofold increase in the risk of coronary heart disease and stroke in women with PCOS. However, although there is a higher risk of cardiovascular disorders, there is no apparent increase in risk of mortality. There is some evidence that oligomenorrhoeic and amenorrhoeic women are at increased risk of developing endometrial hyperplasia and, later, endometrial carcinoma.

Studies show that obesity is an important pathogenic factor in the development of hyper-androgenism in women with PCOS thereby affects ovulation, pregnancy rates and outcomes. At the same time Obesity and PCOS increases the risk for infertility.[6]

A comprehensive community-based study among 3443 adolescent girls (15-18 years) was done to find out the prevalence of PCOS from 10 schools, Trivandrum. Among them, 339 girls were with the symptoms of PCOS and they were under-nourished (37.6%), normal weight (51.2%), overweight (8.6%) and obese (2.6%). Lack of awareness and lifestyle changes are considered to be the major factor leading to this phenomenon.[7]

From all the above studies the researcher found that the adolescent girls have to obtain adequate knowledge regarding PCOS. Since PCOS is the most common endocrinologic disorders during adolescence, there is always a need to investigate all new and relevant data. Early recognition and prompt treatment of PCOS in adolescents is important to prevent long term complications. Therefore as a nurse, the researcher has a pivotal role in creating awareness among the adolescent girls about the modification of lifestyle and prevention of future complications of PCOS. Hence the researcher felt that there is a need to educate regarding lifestyle modifications such as weight reduction, increased exercise, and dietary modifications to the women with PCOD.

Aims

1. To assess and compare the level of knowledge and practice on life style modification among patients with PCOD before and after Video Assisted Teaching.

2. Determine the effectiveness of Video assisted teaching regarding life style modification on knowledge and practice among patients with PCOD.
3. To correlate the level of knowledge and practice on life style modification among patients with PCOD before and after Video Assisted Teaching.
4. To associate the level of knowledge and practice on life style modification among patients with PCOD after Video Assisted Teaching with their selected demographic variables.

Methods & Materials

Quantitative research approach was adopted. One group pretest –post-test, experimental research design was adopted for the present study. The sample size was 50 and non-probability purposive sampling technique was used for selecting the samples. The data were collected for a period of 1 month. The investigator obtained the formal permission from concerned authorities to conduct the study, data were collected from patients who were attending Obstetrics and gynaecology OPD for the first time. The tool used for the study comprises of 2 sections. Section A Demographic Data, Section B- Structured questionnaire developed by the investigator which includes 30 questions to assess the knowledge and practice on life style modification regarding PCOD.. The study was conducted at SRM General Hospital, kancheepuram district the purpose of the study was explained to the patients and consent obtained. The eligible subject after being recruited into the study was given pre-test, followed by the pre-test individualized video teaching was given in their room. The video was run for 15 minutes. After the video their doubts were clarified by the investigator no clarifications were entertained during pretest, after video assisted teaching, the same questionnaire was administered to the subjects. The completed question was collected by the investigator herself.

Results

Comparison of Level of Knowledge and Practice on Life Style Modification among Patients with Pcod before and After Video Assisted Teaching

Table 1: Mean and Standard Deviation of Level of Knowledge on Life Style Modification among Patients with PCOD before and After Video Assisted Teaching

N = 50

GROUP	Before		After		Paired test
	Mean	SD	Mean	SD	t = 35.69
Knowledge	10.66	3.47	20.70	3.15	P = 0.001 Significant

International Journal of Innovative Research in Medical Science (IJIRMS)
Volume 02 Issue 08 August 2017, ISSN No. - 2455-8737
Available online at - www.ijirms.in

Table 2: Mean and Standard Deviation of Level of Practice on Life Style Modification among Patients with PCOD before and After Video Assisted Teaching

N = 50

GROUP	Before		After		Paired test
	Mean	SD	Mean	SD	t = 34.44
Practice	10.34	3.77	21.28	3.85	**P = 0.001** **Significant**

Regarding the correlation of knowledge and practice life style modification ,the analysis revealed that, the knowledge mean value 20.70 with SD 3.15 and practice mean value of 21.28 with SD 3.85 a after video assisted teaching, Pearson's correlation was r=0.6 which was statistically significant at P=0.001 level

Table 3: Association of Level of Knowledge on Life Style Modification among Patients with PCOD After Video Assisted Teaching

N= 50

Demographic Variables		Inadequate		Moderate		Adequate		Chi square Test
		n	%	n	%	n	%	
Age	20 – 25years	o	0	9	29	3	15.8	X^2 = 14.6 P = 0.002 Significant
	25– 30years	0	0	13	41.9	1	5.3	
	> 30 years	0	0	5	16.1	4	21.1	
Educational status	NFE	0	0	7	22.6	1	5.3	X^2 = 11.94 P = 0.008 Significant
	Primary	0	0	8	25.8	1	5.3	
	Secondary	0	0	13	41.9	8	42.2	
	Graduate	0	0	3	9.7	9	47.3	
occupation	unemployed	0	0	8	25.8	2	10.6	X^2 =20.27 P = 0.000 Significant
	Self	0	0	15	48.4	0	0	
	Private	0	0	5	16.1	12	63.2	
	Government	0	0	3	9.7	5	26.3	
	Rs 11362-15187	1	12.5	1	5.9	-	-	
	Rs 15188-30374	1	12.5	11	64.7	4	80	
	Rs> 30374	-	-	1	5.9	-	-	
Residence	Rural	0	0	24	77.4	10	52.6	X^2 = 3.33 P = 0.07 Significant
	Urban	0	0	7	22.6	9	47.4	
Experience	< 5000	0	0	18	58.1	1	5.3	X^2 =19.18 P = 0.000 Significant
	5001-10000	0	0	12	38.7	10	52.6	
	10001-15000	0	0	1	3.2	6	31.6	
	> 15000	0	0	0	0	2	10.5	

Table 4: Association of Level of Practice on Life Style Modification among Patients with PCOD After Video Assisted Teaching

N= 50

Demographic Variables		Inadequate		Moderate		Adequate		Chi square
		n	%	n	%	n	%	
Income	50001-10000	o	0	12	46.2	10	41.7	P = 0.04 Significant
	10001-15000	0	0	1	3.8	6	25.0	
	> 15000	0	0	0	0	2	8.3	

Discussion

The first objective of study was to assess and compare the level of knowledge and practice regarding the life style modification among patients with PCOD before and after Video Assisted Teaching

The analysis depicted that regarding knowledge 30 (60%) patient had inadequate knowledge and 20 (40%) patients had moderately adequate knowledge. None of the patients had adequate knowledge. Considering the practice 33 (66%) patients had unsatisfactory practice; 17 (34%) patient's moderately satisfactory practice and none of them had satisfactory practice. The findings suggested that the

International Journal of Innovative Research in Medical Science (IJIRMS)
Volume 02 Issue 08 August 2017, ISSN No. - 2455-8737
Available online at - www.ijirms.in

patients with PCOD had less than desired knowledge regarding lifestyle modification and also that they were not practicing life style modifications as required.

The analysis depicted that regarding knowledge none of them had inadequate knowledge; 31 (62%) patients had moderately adequate knowledge and 19 (38%) had adequate knowledge. Considering the practice none of the patients had unsatisfactory practice; 26 (52%) patients had moderately satisfactory practice and 24 (48%) had satisfactory practice.

The second objective was Determine the effectiveness of Video assisted teaching regarding life style modification on knowledge and practice among patients with PCOD

The analysis revealed that with respect to knowledge the mean value 10.66 with SD 3.47of pre-test and the mean value of 20.700 with SD 3.15 of post-test projects ‗t' value as 35.69 which is Statistically significant at P = 0.001 level. The analysis also revealed that with respect to practice the mean value 10.34 with SD 3.77 of pre-test and the mean value of 21.28 with SD 3.85 of post-test projects ‗t' value as 34.44 which is statistically significant at P=0.001 level.

The third objective was to correlate the level of knowledge and practice life style modification among patients with PCOD after video assisted teaching.

The analysis revealed that, with respect to the knowledge mean value 20.70 with SD 3.15 and practice mean value of 21.28 with SD 3.85 a after video assisted teaching, Pearson's correlation was r=0.6 which was statistically significant at P=0.001 level.

The fourth objective was to associate the level of knowledge and practice on life style modification among patients with PCOD infarction after video assisted teaching.

Regarding the association of level of knowledge on life style modification among patients with PCOD with the selected demographic variables, there was a significant association found between the knowledge on life style modification among patients with PCOD after video assisted teaching and the demographic variables like Age, Educational status, Occupation, Area of residence and monthly income. There was no association found with respect to other demographic variables like Sex, religion, marital status, habits and weights of the patients.

Ricardo Azziz, Daniel A Dumesic, Mark O. Goodarzee (2012) conducted a study of over 600 unselected women from the general population, the prevalence of PCOS increased minimally and non-significantly with increasing body mass. In contrast, the average body mass of over 700 women with PCOS diagnosed over a 15-year interval

increased linearly and in concert with the increasing obesity of the surrounding population). Taken together, they concluded that these data suggest that the epidemics of excess caloric intake and overweightness play a limited role in the development of PCOS.[8]

Majumdar A, Singh Ta (2009) A Study was conducted in New Delhi to study the prevalence of clinical manifestations in obese and lean PCOS women and their health hazards. The women were diagnosed to have PCOS by the Rotterdam 2003 criteria. Group A included overweight and obese, Group B included normal weight and lean and were further divided into two groups according to their body mass index. The result was found that the prevalence of menstrual irregularities, clinical hyperandrogenism, endometrial hyperplasia (EH), and type 2 diabetes mellitus was significantly higher in the obese group, whereas android central obesity was similar in both groups. The study highlighted that diabetes and EH appears to be more prevalent in the obese, putting a greater risk of morbid problems at a much younger age than the lean ones.[9]

Shobha Elsa, Sanatombi, Devi,AnusuyaPrabhu (2014) conducted a study in selected pre-university colleges of Udupi District and 752 students were selected from six colleges. Risk Status of the students was assessed administering the High Risk Assessment questionnaire and awareness program was given to the risk group students, and the post-test was taken on 8th day following intervention. A total of 102 (13.6%) students were found to have moderate risk for developing PCOS.A significant increase in the knowledge scores on PCOS was observed after the awareness program. At the end of the study they revealed that an awareness program could bring about a desirable change in knowledge among adolescent girls regarding PCOS and prevent future complications.[10]

Conclusion

Polycystic ovarian syndrome is a heterogeneous endocrine disorder that affects one in 15 women worldwide. It is the most frequent cause of hyperandrogenism and oligo-anovulation which have substantial psychological, social and economic consequences. Immigrant populations from the Indian subcontinent to the UK and Australian women of aboriginal heritage also have a higher prevalence of PCOS. The result revealed that with respect to knowledge the mean value 10.66 with SD 3.47of pre test and the mean value of 20.700 with SD 3.1 5 of post test projects ‗t' value as 35.69 which is Statistically significant at P = 0.001 level, with respect to practice the mean value 10.34 with SD 3.77 of pre test and the mean value of 21.28 with SD 3.85 of post test projects ‗t' value as 34.44 which is statistically significant at P=0.001 level. , Pearson's correlation was r=0.6 which was statistically significant at P=0.001 for knowledge and practice on life style modification.

Regarding the association ,there was a significant association found between the knowledge on life style modification among patients with PCOD after video assisted teaching and the demographic variables like Age, Educational status, Occupation, Area of residence and monthly income. Based on the study findings education regarding lifestyle modifications such as weight reduction, increased exercise, and dietary modifications are the essential components in treating and preventing the complications of PCOD

References

[1] Daniel DW, Wordsworth J, Adams J (1988). "Polycystic ovaries: A common finding in normal women". Page no: 870-872.

[2] Akhi. R (1999); "Polycystic ovarian disease" 1st edition Jaypee brothers. Page no: 190 - 192

[3] Janet RA (2002) "Long-term health consequences of PCOS." Human Reproduction. Page no: 231-241.

[4] Stein and Leventhal, coronary heart disease, stroke and the influence of obesity: a systematic review and meta-analysis 2010,nov 4

[5] Kousta E, White DM. The prevalence of polycystic ovaries in women with infertility. HRJ of India 1999 April 90:2545-9.

[6] Joshi B, Mukherjee S, Patil A, Purandare A, Chauhan S, Vaidya R. A cross-sectional study of polycystic ovarian syndrome among adolescent and young girls in Mumbai, India. Indian J Endocrinol Metab. 2014 May;18.317-24

[7] Azziz R, Carmina E, Dewailly D "criteria for defining polycystic ovary as a predominantly hyperandrogenic syndrome" 2006 Dec 91:4237-45.

[8] Agapova SE, Cameo T, Sopher AB, OberfieldSE. Semin Reprod Diagnosis and challenges of polycystic ovary syndrome in adolescence Med. 2014 May; 32.194-201.

[9] Ramanand SJ, Ghongane BB, Ramanand JB, Patwardhan MH, Ghanghas RR, Jain SS. Clinical characteristics of polycystic ovary syndrome in Indian women.Indian J Endocrinol Metab. 2013 Jan;17:138-45

[10] Sotoudeh G, Mirdamadi SR, Siassi F, Khosravi S, Chamari M. Relationships of overweight and obesity with hormonal and metabolic parameters in hirsute women. Actamedicairanica. 2003; 41:37-44.