THE EFFECTIVENESS OF INFORMATION EDUCATION COMMUNATION ON KNOWLEDGE REGARDING POLYCYSTIC OVARIAN SYNDROME AMONG ADOLESCENT GIRLS

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ABSTRACT

Polycystic Ovarian Syndrome is the most common endocrine disorder among women between the age of 18-44. It affects approximately 2% to 20% of this age group. It is one the leading endocrine disease which affects one in 15 women in worldwide. The main aim of the present study was to evaluate the effectiveness of Information Education and Communication regarding Polycystic Ovarian Syndrome among adolescent girls. A quantitative approach using pre-experimental one group pre-test post- test design. 60 adolescent girls was selected using non probability convenient sampling in College of Arts and Sciences. Structured multiple choice questionnaire on demographic variables and knowledge regarding Polycystic Ovarian Syndrome, are used for data collection. Information Education and Communication on Polycystic Ovarian Syndrome was given for 45 minutes on the second day. After the Information Education and Communication, Majority of 86.7% of the adolescent girls had adequate knowledge, moderate Knowledge observed on the 11.7% from adolescent girls and only 1.7% had inadequate knowledge. Analysis used paired 't'test found significant value at p <0.01 level. This study finding conclude that Information Education and Communication was effective in improving knowledge regarding Polycystic Ovarian Syndrome among adolescent girls.

Keywords : assess, effectiveness, Information, Education, Communication, knowledge, Polycystic Ovarian Syndrome.

INTRODUCTION

Polycystic Ovarian Syndrome is the most common endocrine disorder among women between the age between 18-44. It affects approximately 2% to 20% of this age group. It is one the leading endocrine disease and which affects one in 15 women in worldwide. The incidence of PCOS among adolescents is estimated to be between 11 and 26% (3) and about 50% are overweight.

The term Polycystic Ovarian Disease was first described by Irving stein and Micheal Leventhal as a Triad of 'Amenorrhoea', 'Obesity', and 'Hirsutism' in 1935 when they observed the relation between obesity and reproductive disorders. It is hence also known as the 'Stein- Leventhal Syndrome' or 'Hyper androgenic Anovulation' and is the most common endocrine ovarian disorder affecting approximately 2-8% women of reproductive age. Now a day's, it is also referred to as the 'Syndrome O' i.e. over nourishment, overproduction of insulin, ovarian confusion and ovulatory disscruption.

Polycystic Ovary Syndrome is a set of symptoms due to elevated androgens in women. Signs and Symptoms of Polycystic Ovarian Syndrome include irregular or no menstrual periods, heavy periods, excess body and facial hair, acne pelvic pain, difficulty getting pregnant, and patches of thick darker, Velvety skin. Associated conditions include type 2 diabetes, obesity , obstructive sleep apnea, heart disease, mood disorders, endometrial cancer, hypertension, dyslipidemia, hyperinsulinaemia, and infertility. Polycystic ovary syndrome cannot be prevented. But early diagnosis and treatment helps prevent long-term complications, such as infertility, metabolic syndrome, obesity, diabetes, and heart disease.

The main risk factor for polycystic ovary syndrome is a family history of it. A family history of diabetes may increase the risk for PCOS because of the strong relationship between diabetes and PCOS. Long-term use of the seizure medicine valproate has been linked to an increased risk of PCOS. Girls with low birth weight as well as a family history of diabetes mellitus, premature birth, cardiovascular disease, hypertension, hormonal imbalance, genetic problem, endocrine disease, weekend immune system, environmental factors, toxin effect are at risk for developing Polycystic Ovarian Syndrome.

Adolescence is a transitional stage of physical and psychological development that generally occurs during the period from puberty to legal adulthood. Adolescence is a period having the sense of identity and the sense of intimacy. It is the transition from childhood to adulthood. Also many serious diseases in adulthood have their roots in adolescence. For example, tobacco use, sexually transmitted infections

including HIV, and poor eating and exercise habits lead to illness or premature deathlater in life.

NEED FOR THE STUDY

Adolescents form a large section of population of India, about 22.5%. Adolescent girls have to be focused more as it is a period of rapid physical growth,sexual, physiological, and psychological changes. Habits and behaviour picked up during adolescence have life long impact.

Polycystic Ovarian Syndrome is common health problem which increase among adolescent girls and young women during their reproductive years. It is a problem in which a woman's hormones are out of balance leading to menstrual disturbance as well as multiple abnormal cysts in enlarged ovaries, so they do not produce the normal number of eggs and normal ovulation which leads to difficulty of getting pregnant. If it is not treated over time, it can lead to serious health problems such as diabetes and heart disease.

The researcher has a pivotal role in creating awareness among adolescent girls about how to identify the symptoms and modification to be brought in order to prevent further complications of PCOS. Hence the researcher felt that information education and communication package will be an effective teaching strategy to impartknowledge of adolescent girls regarding polycystic ovarian syndrome.

STATEMENT OF THE PROBLEM :

A study to assess the Effectiveness of Information Education Communication on knowledge regarding Polycystic Ovarian Syndrome among adolescent girls in a selected college.

OBJECTIVES :

- To assess the level of knowledge regarding Polycystic Ovarian Syndrome among adolescent girls.

- To administer the Information Education and Communication regarding Polycystic Ovarian Syndrome.

- To determine the effectiveness of Information Education Communication on the level of knowledge regarding Polycystic Ovarian Syndrome among adolescent girls.

- To find out association between post test level of knowledge regarding Polycystic Ovarian Syndrome among adolescent girls and their selected demographic variables.

HYPOTHESIS

- H1 : There is a significant difference in the level of knowledge regarding polycystic ovarian syndrome between pre-test and post-test scores.

- H2: There is a significant association between post-test level of knowledge regarding polycystic ovarian syndrome among adolescent girls and their selected demographic variables.

ASSUMPTIONS

❖ Adolescent girls possess some knowledge regarding Polycystic Ovarian Syndrome.

❖ Proper knowledge regarding polycystic ovarian reduces the risk of getting Polycystic Ovarian Syndrome among adolescent girls.

❖ Information Education and Communication will helps to improve the level of knowledge regarding Polycystic Ovarian Syndrome.

DELIMITATIONS

❖ The study is delimited to a selected college.

❖ The data collection period was delimited to period of 6 weeks.

❖ The age group is limited to 18 -20 years of girls.

METHODOLOGY

Research Approach

In this study quantitative evaluative research approach was used to assess the effectiveness of Information Education Communication on level of knowledge regarding Polycystic Ovarian Syndrome among adolescent girls.

Research Design

Pre-experimental one group pretest post test design without control group was selected for the pretest study to assess the effectiveness of Information Education Communication of Polycystic Ovarian Syndrome on level of knowledge among adolescent girls.

The diagrammatic representation of research design is given below

Group	Day 1	Day 7
Experimental	01 X	02

Keys:

O1 = Pre test knowledge regarding Polycystic Ovarian Syndrome.

 X =Intervention Information Education Communication regarding PolycysticOvarian Syndrome.

O2 = Post test knowledge regarding Polycystic Ovarian Syndrome on 7th day.

Variables

Dependent Variables : Level of knowledge regarding Polycystic Ovarian Syndrome: Independent Variables: Information Education and Communication (IEC) regardingPolycystic Ovarian Syndrome.

Extraneous Variables : Age, Religion, Marital status, Types of family, Educational status, Dietary pattern, Menstrual cycle, BMI, Number of children, any associated disease, History of taking junk foods, Amount of water intake per day, Prevalence of menstrual disorder, Source of information regarding PCOS, Intake of non vegetarian foods.

Setting of the Study

The study was conducted in College of Arts and Sciences.

Population

Target population selected for this study was all the adolescent girls aged between the age group of 18-20 years. Accessible population selected for this study includes adolescent girls in College of Arts and Sciences.

Sample and sample size

The sample of this study was 60 adolescent girls between the age group of 18-20 years.

Criteria for sample selection

Inclusion criteria

- Adolescent girls who are aged between 18-20 years.

- Adolescent girls who are willing to participate in the study.

- Adolescent girls who are present during the data collection period.

- Adolescent girls who can able to read and write English.

Exclusion criteria

- The study is delimited to selected college.

- The study is delimited to the adolescent girls.

Sampling technique

Non- probability convenient sampling technique was used in this study

The study findings are presented in sections as follows:

Section I : Data on demographic variables of adolescent girls.

: Data on assessment of level of knowledge among adolescentgirls.

Section III : Data on effectiveness of Information Education

Communication on level of knowledge regarding PolycysticOvarian Syndrome among adolescent girls.

: Data on association between the post-test level of knowledgeamong adolescent girls with

their selected demographic variables.

DATA ON DEMOGRAPHIC VARIABLES OFADOLESCENT GIRLS.

Frequency and Percentage Distribution of adolescent girls in according to theirDemographic variables.

N=60

S. No.	Demographic Variables	Frequency (f)	Percentage (%)

1	Age (in years) a)18-19b)20-21 c)Above 20	36 24 0	60 40 0
2	Marital status a)Unmarriedb)Married c)widow d)Divorced	48 12 0 0	80 20 0 0
3	Religion a)Hindu b)Christianc)Muslim d)Others		
	Types of family Joint family Nuclear family	32 12 16 0	53 20 27 0
4		17 43	29 71

No.	Item		
5	Educational status		
	a)No formal education b)Primary	0	0
	c)Secondary	0	0
	d)Higher education e)Graduate	0	0
		0	0
6	Dietary pattern a)Vegetarian b)Non vegetarian	60	100
		21	35
	Menstrual cycle	39	65
	a)Regular cycle b)Irregular cycle		
7	BMI		
	a)18-21 b)22-25 c)26-29	41	68
	d)Above 30	19	32
8	ber of Children a)One	27	45
	b)Two c)None	11	18
		12	20
	Do you have any associated	10	17
	disease		
	Yes		
9	No	6	10
		0	0
		54	90
10			
		21	35
		39	65

S. No.	Demographic Variables	Frequency (f)	Percentage (%)
11	u like junk fooda)Yes		
	b)No	51	85
		9	15
12	it of water intake per daya)500 – 1000ml		
	b)1000 – 2000ml	6	10
	c)> 2000ml	41	68
		13	22
13	Do you have any menstrual disorder a)Yesb)No		
		29	48
14	Source of Information a)Health Personalb)Parents c)Teacher d)Mass media e)No information	31	52
		12	20
		0	0
		5	8
		32	54
		11	18
15	How many times you havetaken non vegetarian Weekly once Weekly twice > twice in a week		
		29	48
		20	34
		11	18

SECTION Ⅱ :　　　　　DATA ON ASSESSMENT OF LEVEL OF KNOWLEDGE AMONG
ADOLESCENT GIRLS

<div align="center">

Frequency and Percentage Distribution of

Pre-Test and Post-Test Level of knowledge Among Adolescent Girls

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N=60

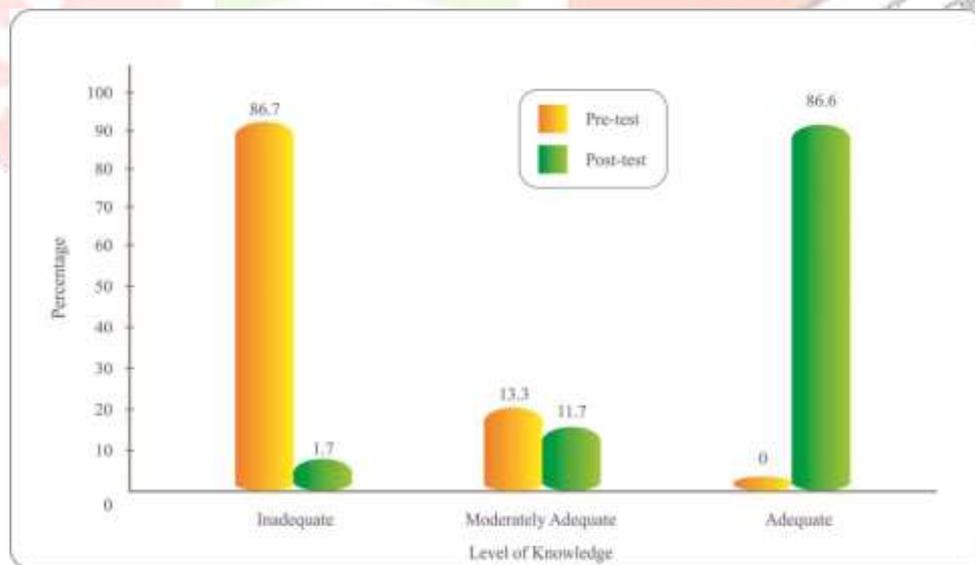| SNO	Level of knowledge	Pre-test		Post-test	
		quency(f)	centage(%)	quency(f)	centage(%)
1	Inadequate knowledge	52	86.6	1	1.7
2	Moderate knowledge	8	13.3	7	11.7
3	Adequate knowledge	0	0	52	86.7
	Total	60	100	60	100

Fig 3 : Frequency and Percentage Distribution of

Pre-Test and Post-Test Level of knowledge Among Adolescent Girls.

II: DATA ON EFFECTIVENESS OF INFORMATIONEDCATION

COMMUNICATION ON LEVEL OF KNOWLEDGE REGARDING POLYCYSTIC OVARIAN

SYNDROME AMONG

ADOLESCENT GIRLS

Mean, Standard Deviation, Mean Difference and 't' Value of Pre-Test and Post-TestLevel of Knowledge among Adolescent Girls.

N=60

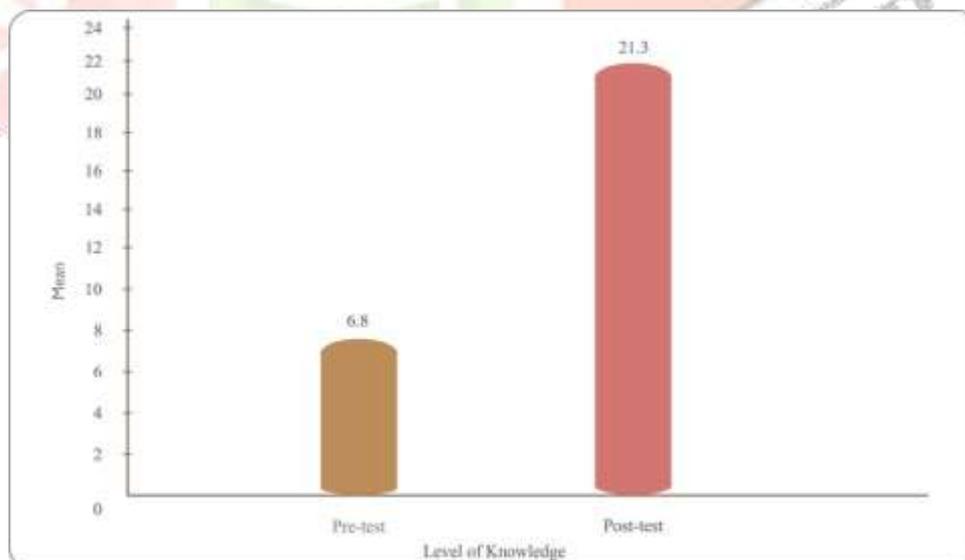| S. No.	Level of Knowledge	Mean	Standard Deviation	Mean Difference	't' Value
1 2	Pre-test Post-test	6.8 21.3	3.4 3	14.8	56.5*

* - Significant at P < 0.05 level

Fig 4 : Mean, Standard Deviation, Mean Difference and 't' Value of Pre-Test and Post-Test Level of Knowledge among Adolescent Girls.

7: **DATA ON ASSOCIATION BETWEEN THE POST-TEST LEVEL OF KNOWLEDE AMONG ADOLESCENT GIRLS WITH THEIR SELECTED DEMOGRAPHIC VARIABLES**.

Frequency, Percentage Distribution and χ2 Value of Post-test Level of knowledgeAmong Adolescent girls with their Selected Demographic Variables

N = 60

S. No.	emographicVariables	Level of knowledge						x^2 Value
		Inadequate		Moderate		Adequate		
		f	%	f	%	f	%	
1	Age (in years)							
	a)18-19	1	2	3	5	32	53	1.55 [NS]
	b)20-21	0	0	4	7	20	33	Df-4
	c)Above 20	0	0	0	0	0	0	
2	Marital status							
	a)Unmarried	0	0	5	9	43	71	4.6 [NS]
	b)Married	1	2	2	3	9	15	Df-6
	c)widow	0	0	0	0	0	0	
	d)Divorced	0	0	0	0	0	0	
3	Religion							
	a)Hindu	1	2	7	12	24	40	8.25 [NS]
	b)Christian	0	0	0	0	12	20	Df-6
	c)Muslim	0	0	0	0	16	26	
	d)Others	0	0	0	0	0	0	
S. No	emographicVariables	Level of knowledge						x^2 Value
		Inadequate		Moderate		Adequate		
		f	%	f	%	f	%	
4	Types of family							
	a)Joint family		0	3	5	14	23	4.16 [NS]
	b)Nuclear family		2	4	7	38	63	Df-2
5	Dietary pattern							

S. No	Demographic Variables	Inadequate f	Inadequate %	Moderate f	Moderate %	Adequate f	Adequate %	X^2 Value
	a)Vegetarian	1	2	2	3	18	30	1.68 [NS]
	b)Non vegetarian	0	0	0	0	0	0	Df-4
	c)Mixed		0	0	5	9	34	56	
6	Menstrual cycle							
	a)Regular cycle	0	0	6	10	35	58	3.26[NS]
	b)Irregular cycle	1	2	1	2	17	28	Df-2
7	BMI							
	a)18-21	0	0	1	2	26	43	16.72*
	b)22-25	0	0	3	5	8	13	Df-6
	c)26-29	0	0	2	3	10	16	
	d)Above 30	1	2	1	2	8	14	

S. No	Demographic Variables	Level of knowledge						X^2 Value
		Inadequate		Moderate		Adequate		
		f	%	f	%	f	%	
8	Number of Children							
	a)One	0	0	4	7	2	3	20.5*
	b)Two	0	0	0	0	0	0	Df-4
	c)None	1	2	3	5	50	83	
9	Do you have any associated disease							
	a)Yes	1	2	6	10	14	23	10.6*
	b)No	0	0	1	2	38	63	Df-2
10	Do you like junk food							
	a)Yes	0	0	4	7	47	78	9.83*
	b)No	1	2	3	5	5	8	Df-2
11	Amount of water intake per day							

S. No	Demographic Variables	Inadequate F	%	Moderate F	%	Adequate F	%	X2 Value
	a)500 – 1000ml	0	0	2	3	4	7	6.54 NS
	b)1000 – 2000ml	1	2	2	4	38	63	Df-4
	c)> 2000ml	0	0	3	5	10	16	
12	Do you have any menstrual disorder							
	a)Yes	0	0	6	10	23	38	5.18 NS
	b)No	1	2	1	2	29	48	Df-2

S. No	Demographic Variables	Level of Knowledge						X2 Value
		Inadequate		Moderate		Adequate		
		F	%	F	%	F	%	
13	Source of Information							
	a)Health Person	1	2	2	3	9	15	9.08 NS
	b) Parents	0	0	0	0	0	0	Df-8
	c)Teacher	0	0	2	3	3	5	
	d)Mass media	0	0	2	4	30	50	
	e)No information	0	0	1	2	10	16	
14	How many times you have taken non vegetarian							
	a)Weekly once	0	0	3	5	26	43	2.8 NS
	b)Weekly twice	1	2	3	5	16	27	Df-4
	c)> twice in a week	0	0	1	2	10	16	

Conclusion

The main conclusion drawn in this present study was majority of the adolescent girls had moderate, inadequate level of knowledge. After Information Education Communication regarding Polycystic Ovarian Syndrome the level of knowledge was increased significantly.

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