# A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Hirsutism with PCOS among Adolescent Girls in Madhav Saraswati Vidya Mandir, Kanpur, U.P.

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### **ABSTRACT**

"A study to assess the effectiveness of structured teaching programme on knowledge regarding Hirsutism with PCOS among adolescent girls in Madhav saraswati vidya mandir, Kanpur, U.P.". Objectives of the study was to determine effectiveness of structured teaching program regarding Hirsutism with PCOS among adolescent girls. In order to accomplish the objectives of the study, a preexperimental one group pretest and posttest was adopted. the sample consists of 60 adolescent girls who fulfilled the inclusion criteria for the study. The convenience sampling technique was used for this study. A structured Socio demographic variables, and Knowledge questionnaire on Hirsutism with PCOS were selected on the basis of the objectives of the study. Data collected from 03-05-2023 to 25-05-2023 from adolescent girls who fulfilled the inclusion criteria. The collected data was tabulated according to various parameters and the complete analysis was done with descriptive and inferential statistics. Interpretation and conclusion: The calculated 't' value of each aspects are higher than the tabulated value at 0.05 level of significance. So, the H1 hypothesis was accepted. The researcher concluded the structured teaching programme was effective. In the pretest the chi-square test implies that there is a significant relationship between pretest knowledge scores sociodemographic variables such as age in years, mothers' education, fathers' education, mothers' occupation, and source of information regarding Hirsutism with PCOS. In the post test the chi-square test implies that there is a significant relationship between posttest knowledge scores and the sociodemographic variables such as age in years, mothers' education, fathers' education, mothers' occupation, fathers' occupation, family history of Hirsutism with PCOS and source of information regarding Hirsutism with PCOS.

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KEYWORDS: Structured Teaching Programme, Hirsutism PCOS Adolescent Girls

#### Need for the study: -

In worldwide, PCOS affects between 8% and 20% of reproductive age women. Because there is no universal definition of PCOS the exact number of women in the United States with PCOS is unknown, but is thought to be approximately 5 million. Most women are diagnosed during their first period. U.S scientists reported that the prevalence of polycystic ovarian syndrome may be as high as 11.2% in girls of reproductive years among this group, adolescent girls make up a large part, perhaps as high as 50% of young girls suffer with polycystic ovarian disease (PCOS). As polycystic ovarian syndrome is the most

common endocrinology disorder during adolescence, there is always a need to investigate all new relevant data. The early recognition and prompt treatment of polycystic ovarian syndrome in adolescencents is important to prevent long term squalene. more research is necessary in order to find answers to many clinical and theoretical aspects of the syndrome. As polycystic ovarian syndrome is the most common endocrinology disorders during adolescence there is always a need to investigate all new relevant data. The early recognition and prompt treatment of polycystic ovarian syndrome in adolescents is

important to prevent long term sequalae. More research is necessary in order to find answers too many clinical and theoretical aspects of the syndrome. A study on teen and college girls in several colleges around India was done. The study revealed that higher percentage of PCOS and there was around 36% of increase cases of PCOS compared from a period of 2007-08. Polycystic ovarian syndrome (PCOS) associated with multiple presentation in females although is a common disorder but due to lack of knowledge females often delays in getting confirmation in diagnosis and treatment. to assess the knowledge about PCOS in young girls, cross sectional study was performed on 400 women with the age group of 18-20 years either studying in school. among 400 participants, only 41 of the women were aware of the team PCOS. 46% of the subject who were aware about the organ system involved on this disease. Most of the people know about this disorder through friends or relatives 49% of the women know about the various sing and symptoms associated with PCOS. Recently, there has been an increase in interest in the field of PCOS research. In the past five years, there have been thousands of articles published concerning the different aspects and relationships regarding PCOS. Despite the high and increasing incidence of PCOS among the population, there are several aspects that remain ambiguous. Few studies have been conducted that grasp PCOS in its entire complexity.

### **Objectives**

Objectives of the study are

- 1. To assess the pre-test knowledge regarding Hirsutism with PCOS among adolescent girls.
- 2. To assess post-test knowledge regarding Hirsutism with PCOS among adolescent girls
- 3. To determine effectiveness of structured teaching program regarding Hirsutism with PCOS among adolescent girls.
- 4. To find out association between Pre-test and posttest level of knowledge regarding Hirsutism with PCOS among adolescent girls

#### Material and method:-

**Research approach and design**: - Quantitative approach with one group pretest post test experimental design.

**Setting of the study**: - Madhav Saraswati Vidya Mandir, Kanpur, U.P.

**Study population**: - Adolescent girls.

**Accessible population**: - Adolescent girls studying at Madhav Vidya Mandir, Kanpur, U.P

Sample size: - 60

**Sampling technique**: - Non probability convenient sampling technique.

#### **Inclusive criteria:**

- 1. Who were between the age of 15-17 years
- 2. Who were willing to participate
- 3. Who knows to read and write Hindi or English.

#### **Exclusion criteria**

- 1. Who was not available at the time of data collection.
- 2. Students belong to other branches like commerce, history were excluded.
- 3. Those who were diagnosed to have PCOS.

#### Variables under study

Variables are characteristics that vary among the subjects being studied. It is the focus of the study and reflects the empirical aspects of the concepts being studied, the investigator measures the variables.

**Independent variable:** The structured teaching programme is the independent variable.

**Dependent variable:** Knowledge among adolescent girls is the dependent variable.

**Demographic variables:-** The demographic variables are age in years, education, mothers' education, fathers' education, mothers' occupation, fathers' occupation, family history of Hirsutism with PCOS and source of information regarding Hirsutism with PCOS.

#### **Description of Tools**

The tool used for the data collection was organized into three sections:

**Section – I**: Socio- demographic data consist of 8 items such as age in years, education, mothers' education, fathers' education, mothers' occupation, fathers' occupation, family history of Hirsutism with PCOS and source of information regarding Hirsutism with PCOS.

**Section – II:** The Knowledge questionnaire on Hirsutism with PCOS is to assess the effectiveness of structured teaching programme on knowledge regarding Hirsutism with PCOS before and after the intervention.

## Data collection procedure: -

A formal written permission was obtained from the Madhav Saraswati Vidya Mandir. The data collected from 03-05-2023 to 25-05-2023 from adolescent girls who fulfilled the inclusion criteria. The Socio demographic variables and Knowledge questionnaire on Hirsutism with PCOS were administered to collect background information and pain level of the patient with Hirsutism with PCOS. The data collection took 30-40 minutes. Before conducting the study,

consent was taken from samples by explaining the purpose of the study.

# **Limitations of the study**

- 1. Only the adolescent girls of Madhav saraswati vidya mandir.
- 2. The study is delimited to the information obtained through questionnaire on pain level developed by the investigator.

# **Analysis and interpretations**

# **Section I:- Base line characteristics of participants.**

**Table 1: - Baseline characteristics of the participants** 

Table 1: - Baseline characteristics of the participants							
Sl.no	Demographic variables	frequency	percentage				
	Age in years						
1.	15	18	30				
1.	16	23	38.3				
	17	19	31.7				
	Education						
2.	10 <sup>TH</sup> std	19	31.7				
	11 <sup>th</sup> std	22	36.7				
	12 <sup>th</sup> std	19	31.7				
	Mother's education						
	Primary education	20	33.3				
3.	secondary education	11	18.3				
3.	Higher secondary education	10	16.7				
	Undergraduate	10	16.7				
	Post graduate	09	15				
	Father's education	λ					
	Primary education International Journal	20	33.3				
4.	secondary education of Trend in Scientific	11	18.3				
4.	Higher secondary education Research and	10	16.7				
	Undergraduate // s Development	10	16.7				
	Post graduate	<del>7</del> 9	15				
	Mother's occupation						
	Home made	15	25				
5.	Private job	20	33.3				
	Government Job	16	26.7				
	Business	09	15				
	Father's occupation						
	No job	06	10				
6.	Private job	30	50				
	Government Job	11	18.3				
	Business	13	21.7				
	Family history of hirsutism with PCOS						
7.	Yes	18	30				
	No	42	70				
	Sources of information regarding Hirsutism with PCOS						
	Family members	09	15				
	Neighbours	06	10				
8.	Medical professionals	08	13.3				
	Friends	12	20				
	Teachers	11	18.3				
	Media	14	23.3				

#### Section II: - knowledge level of participants regarding Hirsutism with PCOS.

Table no 2: - knowledge level of participants

Knowledge level	Inadequate	Moderate	Adequate	
Pretest	33	22	05	
Post test	06	16	38	

# Section III: - Analyse the effectiveness of structured teaching program regarding Hirsutism with PCOS among adolescent girls.

Paired t test used to find out the effectiveness of structured teaching program regarding Hirsutism with PCOS among adolescent girls.

The obtained value was 6.91 and the table value was 2.02. since the obtained value was greater than table value null hypothesis rejected, ie, structured teaching program was effective to improve knowledge among participants regarding Hirsutism with PCOS.

# Section IV:- Assess the association between Pretest knowledge score with selected demographic variables.

Table no: - 5 chi square showing association between pretest knowledge with selected demographic variables

Sl.	variables mean			Obtained	Table	
no	Demographic variables	<=mean	>mean	value	value	Interference
	Age in years	maille	D			
1.	15 S	cie 10%	08	10.25	5.99	S
	16 A	12	Po11V			
	17	09	10	$\langle \lambda \rangle$		
	Education	SKD		Υλ		
2.	10 <sup>TH</sup> std	ona10our	na 09	<b>V</b> 3		
	11 <sup>th</sup> std	in Scient	ific11 9	0.04	5.99	NS
	12 <sup>th</sup> std Rese	arc10and	09	2 2		
	Mother's education 🕢 🛁 🔪 Deve	elopment 11	: 5	B		
			11 5	A	9.48	S
3.	secondary education  \( \sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}	24507470	06	B		
J.	Higher secondary education	06	05	7 10.46		
	Undergraduate \( \sqrt{1} \sqrt{2} \sqrt{2} \sqrt{2}	05	03			
	Post graduate	02	04			
	Father's education	$m_{D}$		14	9.48	S
	Primary education	10	10			
4.	secondary education	03	08			
	Higher secondary education	05	05			
	Undergraduate	07	03			
	Post graduate	06	03			
	Mother's occupation	10	0.5		7.18	
_	Home made	10	05	14.77		
5.	Private job	12	08			S
	Government Job	05	11			
	Business Eather's accuration	04	05			
	Father's occupation No job	01	05			
6.	Private job	17	13	3.92	7.18	NC
0.	Government Job	05	06			NS
	Business	08	05			
	Family history of hirsutism with PCOS	08	03			
7.	Yes	11	07	0.92	3.84	NS
	No	20	22	0.92	J.0 <del>1</del>	140
	110	20	44			

	Sources of information regarding					
8.	Hirsutism with PCOS					
	Family members	06	03			
	Neighbours	01	05			
	Medical professionals	02	06	16.05	11.07	S
	Friends	06	06			
	Teachers	05	06			
	Media	11	03			

**S= significant, NS=not significant** 2=5.99, 4=9.48, 6=12.59, 8=15.50

The chi-square calculation explains that there was a significant association between pre test knowledge level and the sociodemographic variables such as Age in years, mother's education, father's education, mother's occupation and sources of information regarding Hirsutism with PCOS as the chi-square value was greater than the table value at 0.05 level of significance.

Section IV:- Assess the association between Post test knowledge score with selected demographic variables.

Table no: - 5 chi square showing association between post test knowledge with selected demographic variables.

	variables.						
Sl.	Demographic variables	mean mean		Obtained	Table	Interference	
no	Demographic variables	<=mean	>mean	value	value	Interference	
1.	Age in years 15 16 17 Internation	12 5 11 ona 10 our	06 12 09	11.51	5.99	S	
2.	Education 10 <sup>TH</sup> std Pese 11 <sup>th</sup> std 12 <sup>th</sup> std	in Scient arc 08 nd top 14 nt 11	11 0 08 0	2	5.99	NS	
3.	Mother's education Primary education secondary education Higher secondary education Undergraduate Post graduate	13 07 08 05 00	09 06 03 03 06	11.73	9.48	S	
4.	Father's education Primary education secondary education Higher secondary education Undergraduate Post graduate	14 05 05 05 04 05	06 06 05 06 04	13.23	9.48	S	
5.	Mother's occupation Home made Private job Government Job Business	09 10 08 06	06 10 08 03	11.01	7.18	S	
6.	Father's occupation No job Private job Government Job Business	02 18 05 08	04 12 06 05	12.07	7.18	S	

	Family history of hirsutism with PCOS					
7.	Yes	10	08	10	3.84	NS
	No	23	19			
	Sources of information regarding					
	Hirsutism with PCOS Family members	05	04	15.18	11.07	S
	Neighbours	04	02			
8.	Medical professionals	02	06			
	Friends	09	03			
	Teachers	06	05			
	Media	07	07			

S= significant, NS=not significant 2=5.99, 4=9.48, 6=12.59, 8=15.50

The chi-square calculation explains that there was a significant association between post test knowledge level and the sociodemographic variables such as Age in years, mother's education, father's education, mother's occupation, father's occupation and sources of information regarding Hirsutism with PCOS as the chi-square value was greater than the table value at 0.05 level of significance.

#### Conclusion: -

The findings of the study suggest that the adolescent girls may not have knowledge on Hirsutism with PCOS. There is a need for awareness program to increase the knowledge on Hirsutism with PCOS. This study revealed the effectiveness of structured teaching programme on knowledge regarding Hirsutism with PCOS. The adolescent girls need to be supported and encouraged to utilize the limited services available in order to increase their knowledge on Hirsutism with PCOS. The result of lop [5] Pakbaz M, Persson M, Löfgren M, Mogren I. specific interventional package required for such individuals for development of better understanding and health coping mechanism, that it increases the better understanding towards Hirsutism with PCOS. The nurses, nurses' educators and researchers would play a vital role, for the awareness of Hirsutism with **PCOS** 

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