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# A STUDY TO ASSESS THE EFFECTIVENESS OF INFORMATION EDUCATION COMMUNICATION ON KNOWLEDGE REGARDING POLYCYSTIC OVARIAN SYNDROME AMONG ADOLESCENT GIRLS AT SELECTED SCHOOLS OF MANDI GOBINDGARH, PUNJAB

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**ABSTRACT**

***A quantitative approach using pre-experimental one group pre-test post-test design. 60 adolescent girls were selected using non probability convenient sampling adolescent girls at selected Schools of Mandi Gobindgarh, Punjab. 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< 0.05 level.***

## INTRODUCTION

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.

## OBJECTIVES OF STUDY

- To assess the pre-interventional knowledge regarding polycystic ovarian syndrome among adolescent girls in experimental and control group.
- To intervene the Information Education and Communication regarding Polycystic Ovarian Syndrome to experimental group.
- To assess the post-interventional knowledge regarding polycystic ovarian syndrome among adolescent girls in experimental and control group.
- To compare the pre-interventional and post-interventional knowledge regarding polycystic ovarian syndrome among adolescent girls in experimental and control group.
- To find out the association between pre-interventional and post-interventional knowledge regarding polycystic ovarian syndrome among adolescent girls in experimental and control group with the selected socio demographic variables.

## METHODOLOGY

A quantitative research approach and pre-test and post-test design was adopted for the Adolescent girls of Govt. Sen Sec, School Mandi Gobindgarh, Punjab, who had fulfilled the inclusion criteria. Non-probability convenient sampling technique was used to allocate samples. structured multiple choice questionnaire was suitable to make extensive enquiries. The reliability of tool towards effectiveness of information education communication on knowledge regarding polycystic ovarian syndrome was tested by test-retest method. Ethical permission granted from Institutional ethical committee. Data was analysed and interpreted using descriptive and inferential statistics. Prior commencing to data collection the investigator had obtained formal permission to collect the data.

## FINDINGS OF THE STUDY

**Findings related to sample characteristics of adolescent girls in selected Govt School**

About marital status, majority of adolescent girls 48 (80%) were unmarried, 12(20%) married, according to religion, majority of adolescent girls 32 (53%) were Hindu and 12 (20%) were Muslim and 16(27%) were Christian. Regarding types of family, majority of adolescent girls 17 (29%) were joint family, with regards to educational status, all these adolescent girls 60(100%) are Graduate. Regarding dietary pattern, majority of adolescent girls 21(35%) are vegetarian, 39(65%) are non-vegetarian. With regards to menstrual cycle, majority of adolescent girls 41(68%) had regular cycle, In accordance of BMI, majority of adolescent girls 27(45%) were 18-21, 11(18%), with regards to junk food, majority of

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adolescent girls like junk foods 51(85%), Regarding amount of water intake per day, Majority of adolescent girls 6(10%) drink 500-1000ml, With regards to presence of any menstrual disorders of adolescent girls 29(48%) has menstrual disorder, With regards to frequency of intake of non-vegetarian foods, majority of adolescent girls 29(48%) had weekly one, 20(34%) had weekly twice, 11(18%) had more than twice in a week.

## SECTION I: DATA ON ASSESSMENT OF LEVEL OF KNOWLEDGE AMONG ADOLESCENT GIRLS

**Table 1Frequency and Percentage Distribution of Pre-Test and Post-Test Level of knowledge among Adolescent Girls**

N=60

| Sr. No. | Level of knowledge | Pre-test | | Post-test | |
|---|---|---|---|---|---|
| | | Frequency(f) | Percentage(%) | Frequency(f) | Percentage(%) |
| 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 |

Table 1: reveals that among 60 adolescent girls, most of them 52 (86.7%) had inadequate knowledge, 8 (13.3%) had moderate knowledge, no one had adequate knowledge in pre-test and 52(86.7%) had adequate knowledge, 7(11.7%) had moderate knowledge, 1(1.7%) had inadequate knowledge in post-test.

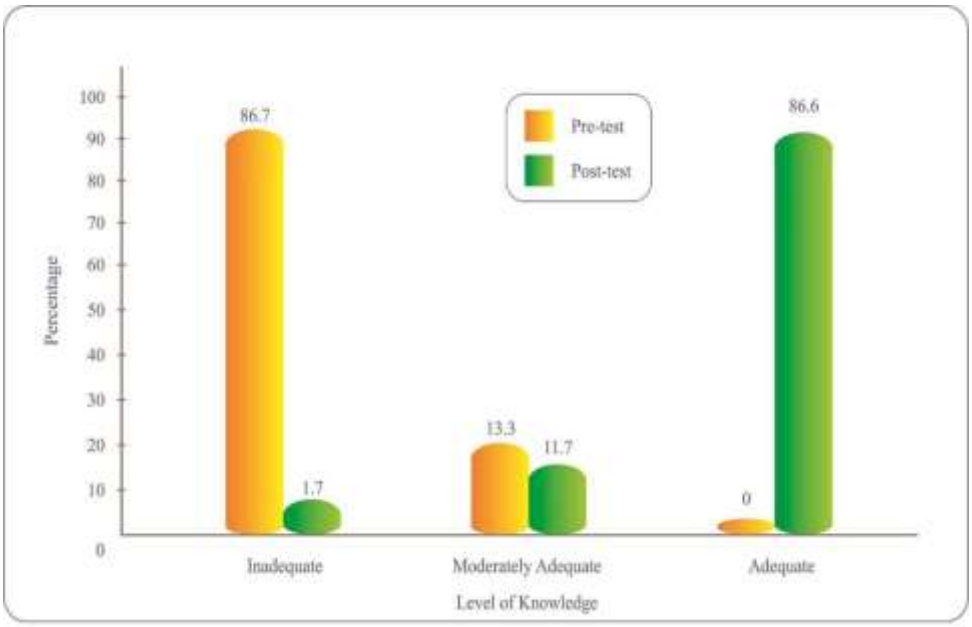


**Fig: 1 Pre test and Post test level of knowledge among adolescent girls**

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## SECTION II: DATA ON EFFECTIVENESS OF INFORMATIONEDCATION COMMUNICATION ON LEVEL OF KNOWLEDGE REGARDING POLYCYSTIC OVARIAN SYNDROME AMONG ADOLESCENT GIRLS

**Table 2 Mean, Standard Deviation, Mean Difference and 't' Value of Pre-Test and Post-TestLevel of Knowledge among Adolescent Girls.**

N=60

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

* - Significant at P < 0.05 level

Table: 2 reveals that among adolescent girls, the mean pre-test score was 6.8 with the standard deviation 3.4 and post-test score was 21.3 with the standard deviation 3. The mean difference was 14.8. The obtained 't' value 56.5 was statistically significant at p<0.05 level.

## SECTION III: DATA ON ASSOCIATION BETWEEN THE POST-TEST LEVEL OF KNOWLEDE AMONG ADOLESCENT GIRLS WITH THEIR SELECTED DEMOGRAPHIC VARIABLES

**Table 3 Frequency, Percentage Distribution and $\chi 2$ Value of Post-test Level of knowledgeAmong Adolescent girls with their Selected Demographic Variables**

N = 60

| Sr. No. | Demographic Variables | 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 | |
| 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** | | | | | | | |
| | 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 | |

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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 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** | | | | | | | |
| | 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 |

| Sr. 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 | |
| | d) 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 | |

## DISCUSSION

**The first objective of the study was to assess the pre-test and post-test level of knowledge regarding polycystic ovarian syndrome among adolescent girls**.

The study findings revealed that among 60 adolescent girls 8(13.3%) had moderate knowledge, 52 (86.7%) had inadequate knowledge, and no one had adequate knowledge in pre-test and 52 (86.7%) had adequate knowledge, 7(11.7%) had moderate knowledge and 1(1.7%) had inadequate knowledge in post-test. It was inferred that, most of the adolescent had moderate and inadequate knowledge in pre-test and most of the had adequate knowledge in post-test.

**The second objective was to assess the effectiveness of Information Education Communication on level of knowledge regarding polycystic ovarian syndrome among adolescent girls.**

The study findings revealed that among adolescent girls, the mean pre-test score was 6.8 with the standard deviation 3.4 and post-test score was 21.3 with the standard deviation 3. The mean difference was 14.8. The obtained 't' value 56.5 was statistically significant at $p<0.05$ level.

**The third objective was to determine the association between the post-testlevel of knowledge among adolescent girls with their selected demographic variables.**

The present study revealed that there is a significant association between post-test level of knowledge among adolescent girls their BMI, No of children, Presence of associated disorder, Intake of junk food. Hence the stated hypothesis ($H_3$) was accepted.

## LIMITATIONS

- The study was limited to 6 weeks.
- The study was limited to students in Desh Bhagat University School of Nursing.

## CONCLUSION

This chapter dealt with the statistical analysis and interpretation of data. The objectives of the study were attained through various statistical method and interpretation. The sample characteristics were dealt with frequency and percentage. The study concluded that there was lack of knowledge of teenage girls regarding PCOS. The administration of information booklet may have helped the teenage girls to understand more about PCOS.

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