



A Study To Assess The Effectiveness Of Structured Teaching Programme On Knowledge Regarding Polycystic Ovarian Syndrome Among Adolescent Girls In Selected Colleges At Udaipur

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Abstract

Background

Polycystic Ovarian Syndrome (PCOS) is one of the most common endocrine disorders affecting adolescent girls and young women. It is characterized by hormonal imbalance, irregular menstrual cycles, obesity, acne, excessive hair growth, and multiple ovarian cysts. Increasing sedentary lifestyle, unhealthy dietary habits, stress, and lack of physical activity have contributed to the rising prevalence of PCOS among adolescents. Lack of awareness regarding symptoms, complications, and preventive measures often results in delayed diagnosis and treatment. Educational interventions are essential to improve awareness and promote healthy lifestyle practices among adolescent girls.

Objectives

1. To assess the pre-test knowledge regarding PCOS among adolescent girls.
2. To evaluate the effectiveness of a structured teaching programme on knowledge regarding PCOS among adolescent girls.
3. To determine the association between pre-test knowledge scores and selected demographic variables.

Methodology

A quantitative research approach with a pre-experimental one-group pre-test and post-test design was adopted for the study. The study was conducted among adolescent girls studying in selected colleges at Udaipur. A total of 100 adolescent girls were selected using a non-probability convenient sampling technique. A structured knowledge questionnaire regarding PCOS was used for data collection. After conducting the pre-test, a structured teaching programme was administered, and the post-test was conducted after seven days. Descriptive and inferential statistics were used for data analysis.

Findings

The study findings revealed that the majority of adolescent girls 62 (62%) had inadequate knowledge regarding PCOS during the pre-test assessment, whereas only 8 (8%) had adequate knowledge. After administration of the structured teaching programme, significant improvement was observed in the post-test knowledge scores, where 54 (54%) participants achieved adequate knowledge regarding PCOS.

The mean pre-test knowledge score was 10.82 ± 3.25 , whereas the mean post-test knowledge score increased to 22.14 ± 2.68 . The mean difference was 11.32. The calculated paired 't' value was 19.24, which was greater than the table value of 1.98 at 0.05 level of significance. This indicated that the structured teaching programme was highly effective in improving knowledge regarding PCOS among adolescent girls.

Significant association was found between pre-test knowledge scores and selected demographic variables such as age, dietary habits, and source of information.

Conclusion

The study concluded that the structured teaching programme was highly effective in improving the knowledge regarding Polycystic Ovarian Syndrome among adolescent girls. Educational programmes can play an important role in increasing awareness, encouraging healthy lifestyle practices, promoting early diagnosis, and preventing complications related to PCOS among adolescents.

Keywords

PCOS, Structured Teaching Programme, Knowledge, Adolescent Girls, Health Education, Rajasthan.

Introduction

Polycystic Ovarian Syndrome (PCOS) is a common hormonal disorder affecting women of reproductive age, especially adolescents and young adults. It is characterized by irregular menstrual cycles, excessive androgen levels, obesity, acne, hirsutism, and polycystic ovaries. PCOS not only affects physical health but also has psychological and emotional consequences such as anxiety, depression, low self-esteem, and body image disturbances.

Adolescence is a critical period of growth and development during which hormonal changes occur rapidly. Unhealthy lifestyle patterns such as consumption of junk food, physical inactivity, stress, and inadequate sleep increase the risk of developing PCOS among adolescent girls. Early diagnosis and proper management are essential to prevent long-term complications such as infertility, diabetes mellitus, cardiovascular disease, and metabolic syndrome.

Awareness regarding PCOS among adolescent girls remains inadequate in many parts of India. Educational interventions such as structured teaching programmes can help improve knowledge regarding symptoms, risk factors, preventive measures, and lifestyle modifications. Such programmes encourage healthy habits and early health-seeking behavior among adolescents.

Need of the Study

PCOS has become one of the leading reproductive health problems among adolescent girls due to changing lifestyle and dietary patterns. Many adolescent girls are unaware of the symptoms and complications of PCOS, resulting in delayed diagnosis and management. Lack of awareness regarding menstrual health and reproductive disorders further increases the risk of complications.

The prevalence of obesity, stress, sedentary lifestyle, and unhealthy eating habits among adolescents has increased significantly in recent years. These factors are strongly associated with the development of PCOS. Untreated PCOS may lead to infertility, diabetes, hypertension, depression, and cardiovascular disorders in later life.

Educational programmes can improve awareness regarding healthy lifestyle practices, menstrual hygiene, regular exercise, balanced diet, and stress management. Therefore, the investigator felt the need to conduct a study to assess the effectiveness of a structured teaching programme on knowledge regarding PCOS among adolescent girls.

Objectives of the Study

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Hypothesis

Research Hypothesis (H_1)

There will be a significant difference between the mean pre-test and post-test knowledge scores regarding PCOS among adolescent girls after administration of the structured teaching programme at 0.05 level of significance.

Null Hypothesis (H_0)

There will be no significant difference between the mean pre-test and post-test knowledge scores regarding PCOS among adolescent girls after administration of the structured teaching programme.

Research Methodology

Research Approach

A quantitative research approach was adopted for the present study to assess the effectiveness of a structured teaching programme on knowledge regarding Polycystic Ovarian Syndrome (PCOS) among adolescent girls.

Research Design

The study utilized a pre-experimental one-group pre-test and post-test research design. This design was considered appropriate to evaluate the effectiveness of the structured teaching programme by comparing the knowledge scores before and after the intervention.

Research Setting

The study was conducted in selected colleges at Udaipur.

Population

The target population of the study consisted of adolescent girls studying in selected colleges at Udaipur.

Sample Size

The sample size of the study comprised 100 adolescent girls.

Sampling Technique

A non-probability convenient sampling technique was used for selecting the participants for the study.

Inclusion Criteria

- Adolescent girls studying in selected colleges.
- Students who were willing to participate in the study.
- Students who were available during the period of data collection.

Exclusion Criteria

- Students who were absent during the period of data collection.
- Students who had previously attended any educational programme regarding PCOS.

Tool for Data Collection

The tool used for data collection consisted of two sections:

Section A: Demographic Variables

This section included demographic information such as age, educational status, dietary habits, type of family, family income, and source of information.

Section B: Structured Knowledge Questionnaire

A structured knowledge questionnaire regarding PCOS was prepared to assess the knowledge of adolescent girls. The questionnaire included items related to meaning, causes, risk factors, signs and symptoms, complications, prevention, management, diet, exercise, and lifestyle modifications associated with PCOS.

Validity and Reliability

The tool was validated by experts in the fields of obstetrics and gynecological nursing, community health nursing, and medical-surgical nursing. Reliability of the tool was established using appropriate statistical methods, and the tool was found to be reliable for conducting the study.

Data Collection Procedure

Formal permission was obtained from the authorities of selected colleges before conducting the study. The purpose of the study was explained to the participants, and informed consent was obtained from them.

A pre-test was conducted using the structured knowledge questionnaire to assess the existing knowledge regarding PCOS among adolescent girls. Following the pre-test, the structured teaching programme regarding PCOS was administered to the participants. The teaching programme included information related to causes, symptoms, complications, prevention, healthy diet, exercise, and management of PCOS.

The post-test was conducted after seven days using the same questionnaire to evaluate the effectiveness of the structured teaching programme.

Plan for Data Analysis

The collected data were organized, tabulated, and analyzed using descriptive and inferential statistics.

- Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to describe demographic variables and knowledge scores.
- Inferential statistics such as paired 't' test were used to assess the effectiveness of the structured teaching programme.
- Chi-square test was used to determine the association between pre-test knowledge scores and selected demographic variables.
- The level of significance was set at 0.05 level.

Data Analysis

Descriptive and inferential statistics such as frequency, percentage, mean, standard deviation, paired 't' test, and chi-square test were used for data analysis.

Results

Table 1: Distribution of Participants According to Demographic Variables (N = 100)

| Demographic Variables | Frequency (f) | Percentage (%) |
|-----------------------|---------------|----------------|
| 17–18 Years | 40 | 40% |
| 19–20 Years | 45 | 45% |
| 21–22 Years | 15 | 15% |
| Nuclear Family | 58 | 58% |
| Joint Family | 42 | 42% |
| Vegetarian | 63 | 63% |
| Mixed Diet | 37 | 37% |

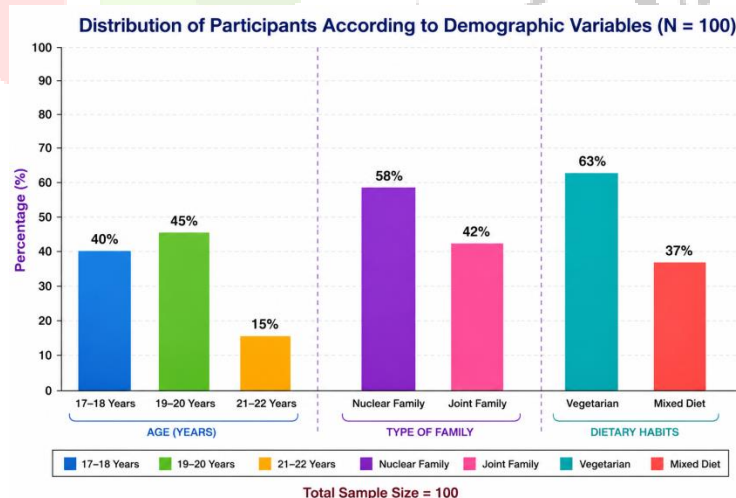


Table 2: Pre-Test Knowledge Scores Regarding PCOS

| Level of Knowledge | Frequency (f) | Percentage (%) |
|-------------------------------|---------------|----------------|
| Inadequate Knowledge | 62 | 62% |
| Moderately Adequate Knowledge | 30 | 30% |

| | | |
|--------------------|---|----|
| Adequate Knowledge | 8 | 8% |
|--------------------|---|----|

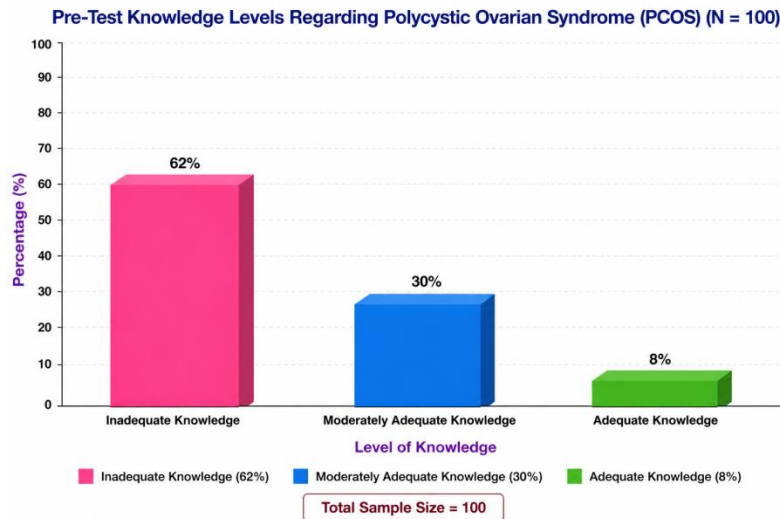


Table 3: Post-Test Knowledge Scores Regarding PCOS

| Level of Knowledge | Frequency (f) | Percentage (%) |
|-------------------------------|---------------|----------------|
| Inadequate Knowledge | 12 | 12% |
| Moderately Adequate Knowledge | 34 | 34% |
| Adequate Knowledge | 54 | 54% |

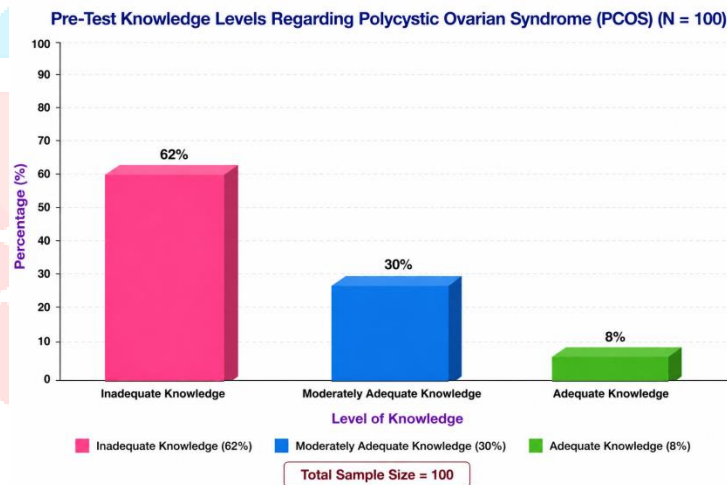
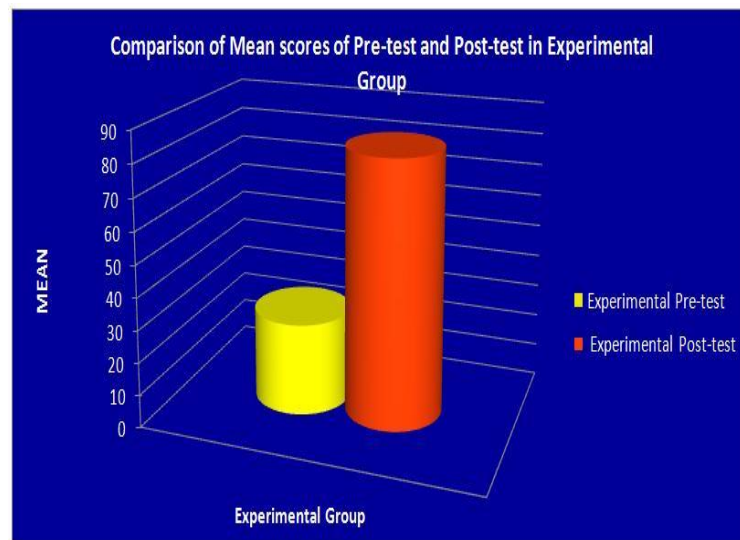


Table 4: Comparison of Pre-Test and Post-Test Knowledge Scores

| Knowledge Scores | Mean | Standard Deviation | Mean Difference | Paired 't' Value | Table Value | Significance |
|------------------|-------|--------------------|-----------------|------------------|-------------|---------------------------|
| Pre-Test | 10.82 | 3.25 | | | | |
| Post-Test | 22.14 | 2.68 | 11.32 | 19.24 | 1.98 | Significant at 0.05 level |



Interpretation

The mean post-test knowledge score was higher than the mean pre-test score, indicating effectiveness of the structured teaching programme. The calculated paired 't' value was greater than the table value at 0.05 level of significance.

Discussion

The findings of the study revealed that adolescent girls had inadequate knowledge regarding PCOS before administration of the structured teaching programme. After the intervention, significant improvement in knowledge scores was observed. The results indicate that educational interventions are effective in improving awareness regarding reproductive health problems among adolescents.

The study findings were consistent with previous studies which reported that structured teaching programmes significantly improved knowledge regarding PCOS and healthy lifestyle practices among adolescent girls.

Conclusion

The study concluded that the structured teaching programme was highly effective in improving knowledge regarding Polycystic Ovarian Syndrome among adolescent girls. Awareness programmes regarding reproductive health and lifestyle modifications should be conducted regularly in educational institutions to promote early diagnosis and prevention of complications related to PCOS.

Recommendations

1. Similar studies can be conducted with larger sample size.
2. Comparative studies can be conducted between rural and urban adolescents.
3. Awareness programmes regarding reproductive health should be organized regularly in colleges.
4. Health education regarding nutrition and exercise should be included in adolescent health programmes.

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