



The Effectiveness of Video-Assisted Intervention on Polycystic Ovarian Syndrome Among Adolescent Girls in Selected Kanpur Colleges

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Introduction

The occurrence of polycystic ovary syndrome among adolescents is extremely common. It is estimated that between 5 and 7 percent of teenage girls around the world suffer from polycystic ovarian syndrome. University of Penn State, Year 2011 In India, a survey was carried out on a national scale. The purpose of this research was to determine the prevalence of PCOS, and the results showed that between 9 and 13% of women are affected by it (National Institute of Health, 2011). According to the findings of a study that was carried out at Dr. M.G.R. Medical University in Tamil Nadu, 10% of women of reproductive age in the state are affected by polycystic ovarian syndrome. Any new information that could be relevant should be investigated because polycystic ovarian syndrome is one of the most common endocrinologic disorders seen in adolescents. [Citation needed] The identification and treatment of polycystic ovarian syndrome in adolescents at an early stage is necessary for the prevention of long-term complications. Additional research is required if one is to find answers to the numerous clinical and theoretical aspects of the syndrome. An investigation into teenage and college-aged women was carried out at a number of educational institutions in India. The study found a higher percentage of people who had PCOS and a 36% increase in the number of cases of PCOS when compared to the period of 2007–2008. PCOS is a condition that affects 20–25% of Indian women who are of childbearing age, according to the department of endocrinology and metabolism at AIIMS. While sixty percent of women who have PCOS are overweight, thirty-five to fifty percent of them have a fatty liver. Seventy percent of people have insulin resistance, sixty to seventy percent have high androgen levels, and forty to sixty percent are glucose intolerant. PCOS affects between 6 and 10 percent of females, the majority of whom are unaware that they have the condition. PCOS was found to exist in between 4% and 4.7% of white women and 3.4% of African American women, according to the findings of a prospective study that included 400 women of reproductive age. The prevalence of PCOS ranged from 4% to 6% in other populations.

Objective

The primary objective of this research is to evaluate the effectiveness of a video-assisted teaching programme on the level of awareness and attitudes held by adolescent girls attending colleges in Kanpur with regard to the early detection and management of polycystic ovarian syndrome (PCOS).

The following is a list of the goals that this study aims to accomplish:

1. To determine how much the experimental and control groups know about polycystic ovarian syndrome and how they feel about early detection and treatment.
2. To find out how much the experimental and control groups know about early detection and treatment.
2. To evaluate the efficacy of the video-assisted teaching programme on the experimental group's awareness and attitude toward the early detection and management of polycystic ovarian syndrome.

3. To determine whether or not there is a connection between the level of knowledge that girls have about polycystic ovarian syndrome and how they feel about it before the test, as well as the demographic factors that the girls in the experimental and control groups have selected as important to them.

The experimental group's mean post-test level of awareness and attitude is significantly higher than the experimental group's mean pretest level of awareness and attitude. This holds true both before and after the test.

The experimental group's mean post-test level of awareness and attitude is significantly higher than the control group's mean post-test level of awareness and attitude. This is the second hypothesis being tested in this study.

There is a significant correlation between the level of knowledge and attitude regarding polycystic ovarian syndrome prior to the test and the demographic variable that the experimental group and the control group selected as their focus of attention.

Methodology

The researcher was able to develop the conceptual framework, tools, and methodology after conducting a comprehensive review of the existing body of research. The following structure was utilised for the literature review:

- Studies on the prevalence of polycystic ovarian syndrome
- Reading materials pertaining to polycystic ovarian syndrome awareness and attitudes
- Studies on the effectiveness of video instruction in the management of polycystic

ovary syndrome (PCOS) The general system theory served as the basis for this research project's conceptual framework (GST). This study employed a quasi-experimental pre-test-posttest control group design. The video teaching programme is the independent variable in this study; the level of awareness and attitude among adolescent girls is the dependent variable. The study was conducted in the United Kingdom. After establishing the validity and reliability of the survey, the researchers used a structured questionnaire along with a modified attitude scale. In the pilot study, there were a total of six teenage girls involved. It was decided whether the study could be done, whether it would be helpful, and whether it could be trusted before continuing with the primary study. The research was carried out at a number of colleges located in Kanpur. The samples were chosen through the use of a non-probability sampling method called convenience sampling. The total number of people who participated in the study was 100, with 50 people participating in both the control group and the experimental group. There was an explanation of the objectives and purpose of the study, and confidentiality was maintained throughout. A structured questionnaire and an altered attitude scale were utilised for the purpose of conducting the pre-test evaluation. The instructional video was played for the group that participated in the experiment. After 30 days, a post-test evaluation was carried out using the same questionnaire as the initial test. In order to analyse and make sense of the data that was collected, both descriptive statistics (such as mean, frequency, standard deviation, and mean percentage) and inferential statistics were utilised (paired "t" test, unpaired "t" test, and chi-square).

Results

The most important takeaways from the research in terms of the sample frequency and percentage distribution in the control and experimental groups based on demographic factors • Sixty percent of the participants in the experimental group are adults aged 18 years or older, whereas 58 percent of the participants in the control group are adults aged 19 years or older. • The majority of people in the experimental group earn less than 100,000 rupees (47 percent), while the majority of people in the control group earn between 10,001 and 15,000 rupees (55 percent). • The majority of individuals in both the experimental group (91%) and the control group (89%), adhere to Hinduism as their religious faith. There is a high level of educational attainment among the majority of parents in both the experimental group (71%) and the control group (71%). • A majority of the participants in both the experimental group (73%) and the control group (66%) do not come from families with a previous history of polycystic ovary syndrome (PCOS). • Twenty of the subjects in the experimental group, which is 57% of the total, and twenty of the subjects in the control group, which is 69% of the total, live in rural areas. • Prior to the start of the study, the majority of participants in both the experimental group (77%) and the control group (70%) were completely ignorant about PCOS. • The majority of subjects in both the experimental group (82%) and the control group (73% of them) consume food that is not suitable for vegetarians. Concerning the allocation of samples according to the degree of knowledge and outlook held by preteen and teenage girls It has been determined that the level of awareness is either inadequate, moderate, or adequate. During the preliminary examination, 61% of the people who were a part of the experimental group had an insufficient level of awareness, 31% had a moderate level of awareness, and none had an adequate level of awareness. Post-test results showed that 28% of the subjects demonstrated a moderate level of awareness, 69% demonstrated an adequate level of awareness, and none demonstrated an inadequate level of awareness. It's possible that an intervention caused this to happen. During the pre-test, 61% of the subjects in the control group had an inadequate level of awareness, while 46% had a moderate level of awareness, and none had an adequate level of awareness. In contrast, during the post-test, 70% of the subjects in the control group's subjects had an inadequate level of awareness, while 25% had a moderate level of awareness, and none had an adequate level of awareness. It is understood in this manner due to the fact that the control group did not receive any kind of intervention. As a direct consequence of this, the pre-test evaluation of all of the samples taken from the experimental group determined that they possessed either an insufficient or a moderate level of awareness. These samples, on the other hand, had levels of awareness that ranged from moderate to adequate after the intervention, whereas none of the controls did. Positive, neutral, and pessimistic attitudes are the three categories of mental stances that people can adopt. At the time of the pretest, 61% of the subjects who were a part of the experimental group had a negative attitude, 39% had a neutral attitude, and none of them had a positive attitude. During the post-test, 20% of the subjects had a positive attitude, 80% had a positive attitude, and none had a negative attitude. None of the subjects had a negative attitude. During the pre-test, the subjects who were a part of the control group had an attitude that was negative 63% of the time, neutral 37% of the time, and none of them had a positive attitude. On the other hand, when they were asked about their attitudes in the post-test, none of the subjects had a positive attitude, 38% of them were neutral, and none of them had a negative attitude. It is understood in this manner due to the fact that the control group did not receive any kind of intervention. The scores on the pre-test and post-test are not significantly different at all. Investigate the efficacy of a video teaching programme for PCOS in adolescent girls and report your findings. The mean score on the pretest for the control group was 12.03 standard deviations, while the mean score on the posttest was 12.06 standard deviations. The mean difference, on the other hand, was only 0.03, and neither the wh value of 1.22 nor the p value of 0.09 were statistically significant in any way. The results demonstrate that there is no difference in the mean awareness scores of the control group between the pre-test and the post-test. The pretest mean score for the experimental group was 12.01 with a standard deviation of 3.67, and the posttest mean score was 18.00 with a standard deviation of 3.44, resulting in a mean difference of 6.99. The value of "t" that was calculated was 9.04, and it was statistically significant at the $p=0.001$ level. According to the findings, there is a discernible change in the pre- and post-test mean awareness scores of the group that was subjected to the experiment. As a consequence of this, the researcher agrees with the hypothesis of the study (H1). The average score on the pretest for the experimental group was 52.836.93, and the average score on the posttest was 73.77 with a standard deviation of 4.94, yielding a mean difference of 20.93. The value of "t" that was calculated to be used was 15.35, and this value was statistically significant at the $p0.001^{***}$ level. The findings indicate that there is a statistically significant change in the mean attitude score of the experimental group between the pretest and the posttest. As a consequence of this, the researcher agrees with the hypothesis of the study (H1). The average score on the posttest for those in the control group was 40.02 out of 4.49. The average posttest score in the experimental group was 72.00 (5.01), and the average difference was 30.99. The calculated value of "t" was 6.19, which indicated that there was a statistically significant difference between the two groups at the $p0.001^{***}$ level. The findings indicate that the posttest mean attitude score of the control group and the experimental group are significantly different from one another. As a consequence of this, the researcher agrees with the hypothesis of the study (H2). CONCLUSION: The medical condition known as polycystic ovarian syndrome develops when a woman's hormones related to female sexuality are imbalanced. Alterations to the menstrual cycle, ovarian cysts, and infertility are just some of the health issues that can be brought on by it. Adolescent girls will benefit from

preventative measures such as increased awareness, for example. The pre-test results showed that the majority of the teenage girls participating in this research project had insufficient knowledge about PCOS and a negative attitude toward it. After watching the video teaching programme, the experimental group experienced a significant shift in their level of awareness as well as their attitude. A video teaching programme was found to be an effective intervention for raising awareness and attitude regarding PCOS, according to the findings of the study. It has been determined that the video teaching programme is successful, in addition to being affordable and convenient. After the conclusion of the research project, participants in the control group were given information regarding the diagnosis and treatment of PCOS at an earlier stage.

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