Original Article

Journal of Nurse Midwifery and Maternal Health
Volume 9 Number 3, September – December 2023
DOI: http://dx.doi.org/10.21088/jnmmh.2454.7506.9323.2

Knowledge on Polycystic Ovarian Disease Among Adolescent Girls: An Evaluation of Structured Teaching Programme

Priya Kumari[1], Priya Kumari[2], Prem Prakash Kumar[3]

How to cite this article:
Priya Kumari, Priya Kumari, Prem Prakash Kumar/Knowledge on Polycystic Ovarian Disease Among Adolescent Girls: An Evaluation of Structured Teaching Programme/J Nurse Midwifery Matern Health. 2023;9(2):97–100.

Abstract

The researcher conducted a true experimental study to evaluate the effectiveness of the structured teaching programme on knowledge of polycystic ovarian disease among adolescent girls in the selected schools of Rohtas, Bihar, India. The study was conducted among randomly selected 60 adolescent girls from the selected schools of Rohtas, Bihar. After obtaining the research consent from the participants the researcher assessed the knowledge level of the study participants using a self-administered tool, semi structured questionnaire on polycystic ovarian disease. After which the structured teaching programme was administered to the participants followed by a post-test. After organizing and analyzing the data the researcher found that out of 60 study participants highly 63.3% of girls had average knowledge, 26.7% of girls had poor knowledge and 10% of girls had good knowledge during the pre-test knowledge score. After the planned teaching programme differently changed the girl's knowledge, whereas the post-test knowledge score majority of 95% of girls had good knowledge, 35% of girls had average knowledge regarding the prevention and management of polycystic ovarian disease. The paired "t" value comparison was 19.49 while df 59 and the p-value for this comparison was significant (0.0001) which is less than the normal p-value (<0.02), study conclude that the planned teaching programme was proved significantly higher effective in improving the knowledge of adolescent girls regarding polycystic ovarian disease. On associating the demographic variable with the pre-test knowledge, it showed that there was no significant association. The Majority of the adolescent girls has no knowledge regarding PCOD. Deficit of knowledge regarding prevention and management of PCOD existed in varying degree of adolescent girls in all the learning area. The structured Teaching Programme utilized in this study was effective in imparting the knowledge of prevention and management of PCOD.

Keywords: Structured Teaching Programme; Adolescent Girls; PCOD.

Author Affiliation: [1-3]B.Sc Nursing 4th Year Student, Narayan Nursing College, Gopal Narayan Singh University, Jamuhar, Rohtas 821305, Bihar, India.

Corresponding Author: **Priya Kumari,** B.Sc Nursing 4th Year Student, Narayan Nursing College, Gopal Narayan Singh University, Jamuhar, Rohtas 821305, Bihar, India.

E-mail: priyakumaribkj523@gmail.com

Received on: 22.05.2023

Accepted on: 08.08.2023

INTRODUCTION

In young women, polycystic ovarian syndrome (PCOS) is a serious endocrine condition that impairs both mental and physical health related quality of life (HRQOL). Additionally, this progresses into a lifelong health problem

that affects about 5 million people in their early twenties in the United States of America. Teenagers in India are thought to have a frequency of 9.13% of PCOS, with ethnic differences being noted. Obesity, menstruation irregularity, and significant physical changes have been identified to be the primary causes of psychological distress. PCOS has a detrimental influence on women's lives that is constantly under appreciated, and it can increase the risk of major anxiety and psychological disorders. Importantly, the psychological toll significantly changes as geographic regions and cultural attitudes shift. These patients may find that the PCOS symptoms are distressing and may be more susceptible to depression and anxiety disorders, which itself may increase their risk of suicide ideation.[1]

Clinically speaking, PCOS is characterized by oligo-ovulation or anovulation, hyperandrogenism that can lead to infertility, as well as other metabolic problems that are connected to it. This leads to an elevated risk of mental and reproductive problems, including infertility, endometrial cancer, and gestational diabetes.[2] However, new cures and treatments may then be focused on addressing the issues that are most crucial to the patient. Understanding the effects of PCOS symptoms, particularly those related to the feminine identity, and treating them from the patients' point of view to prevent it during the adolescent period have recently received more attention. The pooled prevalence of PCOS was 11.33 of a recent meta analytic study.[3]

METHODOLOGY

The researcher conducted a true experimental study to evaluate the effectiveness of the structured teaching programme on knowledge of polycystic ovarian disease among adolescent girls in the selected schools of Rohtas, Bihar, India. The ethical clearance from institute was obtained. The study was conducted among randomly selected 60 adolescent girls from the selected schools of Rohtas, Bihar. After obtaining the research informed consent from the participants the researcher assessed the knowledge level of the study participants using a self-administered tool, a semi structured questionnaire on polycystic ovarian disease mainly focusing on the causes, risk factors, early diagnostic methods, prevention and home management of the polycystic ovarian disease. After which the structured teaching programme was administered to the participants. The structured teaching programme included a lesson plan using a lecture cum discussion method to teach and using av aids like hand outs, black board, LCD projector and posters. The structured teaching programme was followed by a post test using the same questionnaire used in the pre-test to assess the effectiveness of the structured teaching programme.

RESULT

After organizing and analyzing the data the researcher found that out of 60 study participants highly 63.3% of girls had average knowledge, 26.7% of girls had poor knowledge and 10% of girls had good knowledge during the pre-test knowledge score. After the planned teaching programme differently changed the girl's knowledge, whereas the post-test knowledge score majority of 95% of girls had good knowledge, 35% of girls had average knowledge regarding the prevention and management of polycystic ovarian disease (fig. 1).

Table 1: Showing the distribution of range, mean and standard derivation, paired "t" value of study participants as per as pre-test knowledge score and post-test knowledge score.

Knowledge Score	Means Score	SD	Means Difference	df	Paired "t" value	P-value
Pre-test	9.1	2.44	9.10	59	19.49	0.0001
Post-test	16.6	1.63	16.65			

The post-test knowledge score ranged from 16.6 (df-59) which is higher than the pre-test knowledge score 9.1 (df-59). The mean post-test knowledge score (of 16.6 + -1.63) was higher than the pre-test knowledge score 9.1 + -2.44). The paired "t" value comparison was 19.49 while df 59 and the p-value for this comparison was significant (0.0001) which is less than the normal p-value (<0.02), study conclude that the Ho (null hypothesis) was rejected and H01 (research hypothesis) is accepted. It can be inferred that the planned teaching programme was proved significantly higher effective in improving the knowledge of adolescent girls regarding polycystic ovarian disease. (Table 1).

On associating the demographic variable with the post-test knowledge, it showed that there

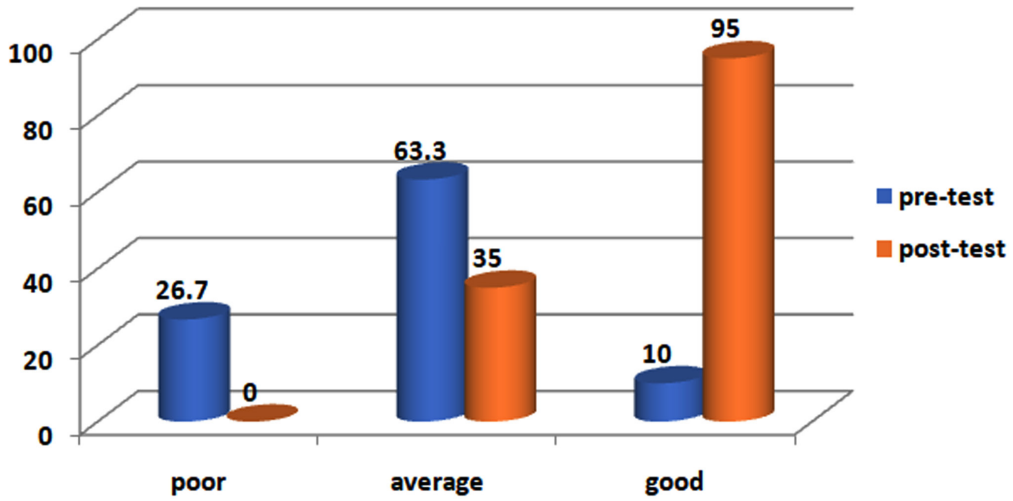

Fig. 1: Cylinder diagram showing the distribution of study participants of pre-test knowledge score and post-test knowledge score.

was no significant association between post-test knowledge score and socio-demographic variables such as age, educational qualification, types of family, residence, source of information regarding the knowledge of polycystic ovarian disease among adolescent girls.

DISCUSSION

The first objective of the study was to assess the level of knowledge on the PCOD among the adolescent girls in the selected schools of Rohtas. And the result showed that about 66% of the study participants had only average knowledge. The result is being supported by:

- Research on teenage girls' understanding of polycystic ovarian disease done at Vinayaka Mission's college of nursing in Karaikal lends credibility to the study's conclusions. According to the study's findings, the majority of teenage girls 60% (36) had insufficient information, 33% (20) had intermediate knowledge, and 6.6% (four) had appropriate understanding about polycystic ovarian disease.[4]
- Research that looked at adolescent females in a few schools in the Mohali area to see how much they knew about polycystic ovarian disorder supports the conclusions. Results: The majority of girls, 123 (61.5%), had fair knowledge, while just one girl, or 0.5% of females, had exceptional knowledge. Only 35 females, or 17.5%, possessed a high degree of expertise. The median score was 8.0, with a minimum score of 3.0 and a maximum score of 16.0, and the mean score was 8.0 with a standard deviation of 2.7.[5]

The second objective of the study was to assess the effectiveness of the structured teaching programme on the knowledge levels on PCOD among the study participants and the result showed that there was a significant effectiveness on the Structured teaching programme seen in the post test. This result is being supported by the studies like:

- Adolescent females participated in research on the application and assessment of information on polycystic ovarian disease prevention and management. The goal of the study is to develop and assess a systematic education programme on information related polycystic ovarian disease treatment and prevention among teenage females. Experimental quantitative research study is the method employed. Sixty teen females participated in STP sessions. Adolescent females lacked understanding about polycystic ovarian disease prevention and management before to the organised instruction session. This knowledge was later enhanced.[6]
- Research designed to evaluate the efficiency of a structured training programme on information related polycystic ovarian disease prevention and management among adolescent girls supports the study's findings.

According to the pre-test knowledge score, 63.3% of females had average knowledge, 26.7% had bad knowledge, and 10% had strong knowledge. In contrast to the majority of girls (95%), who scored well on the knowledge exam after the intended instruction programme, 35% of girls scored averagely on the knowledge test addressing the prevention and treatment of polycystic ovarian disease.[7]

It was found that was statistically significant association between knowledge scores of adolescent girls and type of family, residence, Source of information. It was found that there was no significant association between knowledge scores of girls with age, qualification.

CONCLUSION

Deficit of knowledge regarding prevention and management of PCOD existed in varying degree of adolescent girls in all the learning area. The structured Teaching Programme utilized in this study was effective in imparting the knowledge of prevention and management of PCOD.[8] Though the overall prevalence of the polycystic ovarian disease is low to 4-5 % of the female population, yet has become and emerging fear as it directly affects the reproductive health of young females which is not acceptable as the third sustainable development goals has focused on the good health and wellbeing to all.

ACKNOWLEDGEMENT

The researchers are thankful to Prof. Dr. Latha K, Dean cum Principal, Prof. Dr. Shaveta Sharma, Vice Principal, Mr. Mohammed Umar Rathore, M.Sc Tutor, Department of Community health Nursing, and Mr. Mohammed Rafi, HOD in-charge, Department of Community Health Nursing, NNC, GNSU for their valuable support and contributions.

REFERENCES

1. Tabassum, F., Jyoti, C., Sinha, H., Dhar, K., & Akhtar, M. (2021). Impact of polycystic ovary syndrome on quality of life of women in correlation to age, basal metabolic index, education and marriage. PLOS ONE, 16(3), e0247486. doi: 10.1371/journal.pone.0247486.
2. Escobar-Morreale HF. Polycystic ovary syndrome: definition, aetiology, diagnosis and treatment. Nature Reviews Endocrinology. 2018;14(5):270. pmid:29569621.
3. Sirmans, S., & Pate, K. (2013). Epidemiology, diagnosis, and management of polycystic ovary syndrome. Clinical Epidemiology, 1. doi: 10.2147/clep.s37559.
4. Bharali, M., Rajendran, R., Goswami, J., Singal, K., & Rajendran, V. (2022). Prevalence of Polycystic Ovarian Syndrome in India: A Systematic Review and Meta-Analysis. Cureus. doi: 10.7759/cureus.32351.