



E-ISSN: 2663-0435
P-ISSN: 2663-0427
www.nursingpractice.net
IJMNP 2024; 7(2): 83-86
Received: 09-08-2024
Accepted: 15-09-2024

Reena Chavan
Assistant Professor MAEER's
Vishwaraj Institute of Nursing
Pune, Maharashtra, India

Dr. Shivcharan Singh Gandhar
Principal, MAEER's
Vishwaraj Institute of Nursing
Pune, Maharashtra, India

Vishvanath Tambe
Basic B.Sc Nursing Final year
Students MAEER's Vishwaraj
Institute of Nursing, Pune,
Maharashtra, India

Divya Shinde
Basic B.Sc Nursing Final year
Students MAEER's Vishwaraj
Institute of Nursing, Pune,
Maharashtra, India

Rajnandani Kale
Basic B.Sc Nursing Final year
Students MAEER's Vishwaraj
Institute of Nursing, Pune,
Maharashtra, India

Ashwini Gangane
Basic B.Sc Nursing Final year
Students MAEER's Vishwaraj
Institute of Nursing, Pune,
Maharashtra, India

Corresponding Author:
Reena Chavan
Assistant Professor MAEER's
Vishwaraj Institute of Nursing
Pune, Maharashtra, India

International Journal of Midwifery and Nursing Practice

A study to assess the effectiveness of health teaching programme regarding Polycystic Ovarian Syndrome (PCOS) among 10 to 19 yr girls in selected schools of Pune city

Reena Chavan, Shivcharan Singh Gandhar, Vishvanath Tambe, Divya Shinde, Rajnandani Kale and Ashwini Gangane

DOI: <https://doi.org/10.33545/26630427.2024.v7.i2b.175>

Abstract

Introduction: In developing countries like India, women are mostly observed to neglect their health. Due to the absence of knowledge and ignorance, women used to suffer from many health issues. Some are preventable, some are curable if it is recognized at an early level, and some are not curable if it is already late.

Title of the study: A study to evaluate the effectiveness of health teaching programme on knowledge regarding Polycystic Ovarian Syndrome among 10 to 19yr girls in selected school of Pune city.

Research Methodology: In the study quantitative research approach was used. An exploratory pre-test post-test design was selected as the investigators study methodology. The non-probability purposive sampling technique was used. The sample consist of 60 among among 10 to 19 yr girls in selected schools of Pune city who had fulfilled the inclusion criteria of the study in order to assess the knowledge regarding PCOS. The reliability of tool was done on 6 participants the value was 0.73 and tool found reliable.

Result: The study mentioned above reveals that according to the study mentioned above, 78.33% of samples had good knowledge, 21.67% had average knowledge, and 0% had poor knowledge. The average score was 16.13 with a 3.24 SD.

Conclusion: It was concluded that, this topic needs to be included in the courses on community health nursing and medical surgical nursing. Health care practitioners should place more emphasis on health education to raise awareness regarding PCOS.

Keywords: Evaluate, effectiveness, health teaching programme, knowledge, polycystic ovarian syndrome

Introduction

In developing countries like India, women are mostly observed to neglect their health. Due to the absence of knowledge and ignorance, women used to suffer from many health issues. Some are preventable, some are curable if it is recognized at an early level, and some are not curable if it is already late. Among those health problems, one of the major health issues is PCOS, an endocrine or hormonal disorder that women can face mostly during their reproductive years. It's a combination of certain symptoms associated with a hormone imbalance that may affect women and most girls at reproductive age ^[1].

Polycystic ovary syndrome (PCOS) is a complex condition characterized by elevated androgen levels, menstrual irregularities, and/or small cysts on one or both ovaries ^[2]. The disorder can be morphological (polycystic ovaries) or predominantly biochemical (Hyperglycaemia). Hyperandrogenism, a clinical hallmark of PCOS, can cause inhibition of follicular development, micro cysts in the ovaries, an ovulation, and menstrual changes ^[3]. It is one of the most common endocrine disorders of women in reproductive age group, with prevalence of 4- 12% globally. In India, the incidence is 0.5%- 4% ^[4]. It affects about 5-10% of the female population who are in the age group of 12- 45 years and produces symptoms in approximately 5% to 10% of women of reproductive age and is thought to be one of the leading causes of infertility. The syndrome can affect 10 to 19yrs, women of childbearing age, and post-menopausal women. The main concerns in caring for the adolescence with PCOS are two fold.

The first involves cyclic control of irregular menstruation cycles. The second issue involves the avoidance of long-term sequel that are associated with obesity, insulin resistance, glucose intolerance and type 2 diabetes. The conditions can result in subsequent lipid abnormalities and hypertension that are significant risk factors in development of cardiac disorders [5].

Need of the Study

Polycystic Ovarian Syndrome is common health problem which increase among 10 to 19 yr girls and young women during their reproductive years. It is a problem in which a women’s hormones are out of balance leading to menstrual disturbance as well as multiple abnormal cysts in enlarged ovaries, so they do not produce the normal number of eggs and normal ovulation which leads to difficulty of getting pregnant. If it is not treated over time, it can lead to serious health problems such as diabetes and heart disease.

According to a study by PCOS society, one in every 10 women in India has polycystic ovary syndrome (PCOS), a common endocrinal system disorder among women of reproductive age. And out of every 10 women diagnosed with PCOS, six are teenage girls.

A population study revealed that overt and occult PCOS accounted for 90% of patients with oligomenorrhoea and 37% with amenorrhoea, or 73% with oligo- or amenorrhoea. Oligo- or amenorrhoea accounted for 21% of couples with infertility and the annual incidence was 247 patients per million of the general population. The annual incidence of infertility due to PCOS per million was 41 with overt PCOS and 139 with occult PCOS (total 180). Of those, 140 appeared to respond well to clomiphene (78%) but 40 (22%) failed, requiring alternative therapy.

A study on teenage girls and college girls in several colleges around India was found to show a higher percentage of college girls with PCOS and there was around 36% of increase in cases of PCOS compared from a period of 2007-08, showing a severe fast increase of cases of PCOS among college girls in an alarming rate.

A study conducted by the department of endocrinology and metabolism, AIIMS, shows that about 20-25 per cent of Indian women of childbearing age are suffering from PCOS. While 60 per cent of women with PCOS are obese, 35-50 per cent have a fatty liver. About 70 per cent have insulin resistance, 60-70 per cent have high level of androgen and 40-60 per cent have glucose intolerance.

About 6 to 10% of girls gets affected by PCOS and are even not aware of their presence. In a prospective study of 400 women of reproductive age, 4% to 4.7% of white women and 3.4% of African American women had PCOS. A similar rate of 4% to 6% has been found in other populations.

Aim of the Study

A study to evaluate the effectiveness of health teaching programme on knowledge regarding Polycystic Ovarian Syndrome among 10 to 19 yr girls in selected school of Pune city.

Methodology

A study to evaluate the effectiveness of health teaching programme on knowledge regarding Polycystic Ovarian Syndrome among 10 to 19 yr girls in selected school of Pune city. Data analysis was done mainly using descriptive statistics.

Result

Section I: Distribution of samples according to demographic variables

- Majority of 33.33% of subject belongs to 10-12 years, 66.67% were from 13 to 15years, 0% were from 16 to 18 years and 0% belongs to 19 years of age group.
- Majority of 98.33% of the subject were middle class, 1.67% of subject were higher class and 0% of samples were lower class.
- Majority of 31.67% completed primary education, 31.67% completed higher secondary and graduate education and 21.67% completed primary education and 15% were of no formal education.
- Majority of 55.00% of girls had menarche from 13–15years, 33.33% of girls had menarche from 16- 18 years and 0% of girls had menarche from 19 years.
- Majority of 66.67% of girls had menstrual regularity and 33.33% of girls had menstrual irregularity.

Section II: Distribution of data as per knowledge regarding Polycystic Ovarian Syndrome among 10 to 19yr girls before intervention

Table 1: Shows that majority 0% of samples were having good knowledge, 21.67% having average knowledge and 78.33% having poor knowledge. Mean score was 6.95 along with 2.38 SD.

Level of knowledge	F	%	Mean	SD
Poor(1-7)	47	78.33	6.95	2.38
Average(8-13)	13	21.67		
Good(14-20)	0	0		

Section III: Distribution of data as per knowledge regarding Polycystic Ovarian Syndrome among 10 to 19yr girls after intervention

Table 2: Shows that majority 78.33% of samples were having good knowledge, 21.67% having average knowledge and 0.00% having poor knowledge. Mean score was 16.13 along with 3.24 sd.

PCOS	f	%	Mean	SD
Poor (1-7)	0	0.00	16.13	3.24
Average (8-13)	13	21.67		
Good (14-20)	47	78.33		

Section IV: To Evaluate The Effectiveness Of Health Teaching Programme On Knowledge Regarding Polycystic Ovarian Syndrome Among Adolescent Girls In Selected School Of Pune City

Table 3: Show significant Effectiveness of Health Teaching Programme on Knowledge Regarding Polycystic Ovarian Syndrome.

Effectiveness of Attitude	Mean	SD	T Value	P Value	Remark
Pre-test	6.95	2.38	2.000	4.303	Significant
Post-test	16.13	3.24			

Section V: Association of findings with selected demographic variables

It show no any significant association with age, socio-economic status and education of parents, Age of Menarche and Regularity.

Discussion

- Findings show that in pre-test most of the girls (78.33%) had poor level of knowledge, (21.67%) had

average level of knowledge and some had good level of knowledge regarding Polycystic Ovarian Syndrome. However, in post-test most of the girls (78.33%) had good level of knowledge, (21.67%) had average level of knowledge and none had poor level of knowledge regarding Polycystic Ovarian Syndrome. Knowledge score of girls in post-test was 16.13 with a mean difference of 3.24. The computed “t” value of 36.98 was found to be statistically significant at 0.05 level of significance. So hypothesis H₁₁ was accepted.

- Majority of 33% of subject belongs to 10-12 years, 66.67% were from 13 to 15years, 0% were from 16 to 18 years and 0% belongs to 19 years of age group.
- Majority of 98.33% of the subject were middle class, 1.67% of subject were higher class and 0% of samples were lower class.
- Majority of 31.67% completed primary education, 31.67% completed higher secondary and graduate education and 21.67% completed primary education and 15% were of no formal education.
- Majority of 55.00% of girls had menarche from 13–15years, 33.33% of girls had menarche from 16- 18 years and 0% of girls had menarche from 19 years.
- Majority of 66.67% of girls had menstrual regularity and 33.33% of girls had menstrual irregularity.

Conclusion

The purpose of the present study was to to assess the effectiveness of health teaching program on knowledge regarding Polycystic Ovarian Syndrome among 10 to 19yr girls in selected school of Pune city. One group pre-test post-test experimental design was used for our study which consisted of 60 samples that were selected on the basis of non-purposive sampling technique. The validity and reliability of the tool was done, which suggested that tool is was reliable. Also pilot study was conducted among 6 sample size and the feasibility was established. Based on the objectives and the hypothesis the data collected was analyzed. Also data analysis was done by calculating mean, standard deviation, frequency, percentage, t test value, p value.

Recommendation

- The same study can be done over large population to generalize the finding.
- A study can be done to assess on Polycystic Ovarian Syndrome women.
- A similar study can be done on staff nurses to improve the knowledge and awareness about the Polycystic Ovarian Syndrome.
- A similar study can be done on student nurses to improve the knowledge about the Polycystic Ovarian Syndrome.

Conflict of Interest

The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

Funding Source

There is no funding Source for this study

Acknowledgement

Most sincerely convey our deep sense of gratitude to my principal and research guide for remarkable guidance and academic support during this study. At last we are grateful about the support and help we got throughout the research study from our colleagues and participants contribute to accomplishing the research study successfully.

References

1. Umland EM, Weinstein LC, Buchanan EM. Menstruation-related disorders. In: Dipiro JT, Talbert RL, Yee GC, *et al.*, editors. *Pharmacotherapy: A pathophysiologic approach*. 8th ed. New York: McGraw-Hill; c2011. p. 1393.
2. Lin LH, Baracat MC, Gustavo AR, *et al.* Androgen receptor gene polymorphism and polycystic ovary syndrome. *International Journal of Gynaecology & Obstetrics*. 2013;120:115-118.
3. American Congress of Obstetricians and Gynecologists. ACOG practice bulletin no. 108: Polycystic ovary syndrome. *Obstetrics & Gynecology*. 2009;114(4):936-949.
4. National Institutes of Health Department of Health and Human Services. Beyond infertility: Polycystic ovary syndrome (PCOS). NIH Pub. No. 08-5863, April 2008. Available from: https://www.nichd.nih.gov/publications/pubs/upload/pcos_booklet.pdf. Accessed March 27, 2013.
5. Shannon M, Wang Y. Polycystic ovary syndrome: A common but often unrecognized condition. *Journal of Midwifery & Women's Health*. 2012;57:221-230.
6. Polycystic ovary syndrome in adolescents: A qualitative study [Internet]. Available from: <https://www.dovepress.com/polycystic-ovary-syndrome-in-adolescents-a-qualitative-study-peer-reviewed-fulltext-article-prbm>.
7. Available from: <https://www.msjonline.org/index.php/ijrms/article/view/11387>.
8. Brar KK, Kaur T, Ramanadin PV. Knowledge regarding polycystic ovarian syndrome (PCOS) among the teenage girls. *International Journal of Nursing Education and Research*. 2014;4(2):136-140. DOI: 10.5958/2454-2660.2016.00031.4.
9. Dalal M, Babu M, Rastogi S. An exploratory survey to assess the knowledge, practice, and prevalence of Polycystic Ovarian Syndrome among women attending gynecology OPD of selected hospitals of Delhi with a view to develop a health care package on Polycystic Ovarian Syndrome and its management. *IOSR Journal of Nursing & Health Science*. 2014;3(6):39-42. e-ISSN: 2320-1959; p-ISSN: 2320-1940.
10. Dias DMI. A descriptive study to assess the knowledge and warning signs of Polycystic Ovarian Syndrome among girls of selected colleges of Belagavi Karnataka. KLE Academy of Higher Education and Research, Belagavi; c2015. Available from: <http://hdl.handle.net/123456789/2442>.
11. Sunanda B, Nayak S. A study to assess the knowledge regarding PCOS (Polycystic Ovarian Syndrome) among nursing students at NUINS. *Nitte University Journal of Health Science*. 2016;6(3):24-26.
12. Haq NU, Khan Z, Riaz S, Nasim A, Shahwani R, Tahir M. Prevalence and knowledge of polycystic ovary

syndrome (PCOS) among female science students of different public universities of Quetta, Pakistan. Imperial Journal of Interdisciplinary Research. 2017;3(6):385–392.

How to Cite This Article

Chavan R, Gandhar SS, Tambe V, Shinde D, Kale R, Gangane A. A study to assess the effectiveness of health teaching programme regarding Polycystic Ovarian Syndrome (PCOS) among 10 to 19 yr girls in selected schools of Pune city. International Journal of Midwifery and Nursing Practice. 2024; 7(2): 83-86.

Creative Commons (CC) License

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.