Effectiveness of structured teaching programme on polycystic ovarian syndrome among undergraduate female students in colleges of Pokhara

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ABSTRACT

Introduction: Polycystic ovarian syndrome (PCOS) is a common hormonal disorder affecting 1 in 10 women of reproductive age, causing irregular periods, ovarian cysts, weight gain and fertility issues. Due to inadequate awareness, many women remain undiagnosed. This study aimed to assess the effectiveness of structured teaching programme on polycystic ovarian syndrome among undergraduate female students in colleges of Pokhara. **Methods:** A pre-experimental one group pre-test post-test research design was used among 141 undergraduate female students in selected colleges under Tribhuvan University of Pokhara by using probability stratified random sampling technique. Data were collected through structured self-administered questionnaire where pre-test and post-test was done on in a gap of 28 days of teaching programme. Analysis was performed using SPSS Version 16, employing descriptive statistics (frequency, percentage, mean, standard deviation) and inferential statistics (paired t-test and chi-square test). **Results:** The findings of the study revealed that 47(33.3%) of students had inadequate knowledge before teaching programme, which improved to 67(47.5%) with adequate knowledge after teaching programme. The mean knowledge score before and after teaching programme was 43.81±9.31 and 56.20±12.47 respectively. The alternative hypothesis was accepted, indicating a significant improvement. Furthermore, a significant association was also found between students' knowledge levels and their faculty (p = 0.032 pretest). **Conclusions:** The study concluded that structured teaching programme on polycystic ovarian syndrome was effective, as it significantly improved students' knowledge. To enhance students' understanding of Polycystic Ovarian Syndrome (PCOS), the college authorities can incorporate PCOS education into the college curriculum, organize regular educational programs, video-assisted teaching sessions, lectures and interactive discussions.

Keywords: Effectiveness, polycystic ovarian syndrome, structured teaching programme, undergraduate female students.

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INTRODUCTION

Polycystic ovarian syndrome (PCOS) is a common hormonal disorder affecting 10–13% of women of reproductive age, with up to 70% undiagnosed. It often begins in adolescence and causes symptoms like irregular periods, ovarian cysts, weight gain, and infertility. Though incurable, symptoms can be managed through lifestyle changes, medication, and fertility treatments. PCOS is linked to long-term health risks such as type 2 diabetes, cardiovascular disease, endometrial cancer, and psychological issues. Early management is crucial to improve quality of life and reduce associated risks.[1] Globally, PCOS affects 5–18% of women, with an average prevalence of 276.4 cases per 100,000 in Europe. About 50% of women are unaware or face delayed diagnosis.[2] A global meta-analysis found a 9.2% prevalence, highest in Africa.[3] South Asians show higher rates of PCOS and obesity, while diabetes is more common in Filipinas.[4] In India, 56.6% of women with PCOS experience mental health issues, including depression (40%) and mood disorders (16.6%) due to factors like hirsutism, contraceptive side effects, and fertility stress.[5]

A 2017 study at Kathmandu Diabetes and Thyroid Centre found PCOS to be a common gynecological disorder in Nepal. Key findings included menstrual irregularity in 83%, hyperandrogenism in 82%, and infertility in 43% of cases, with most patients showing chronic anovulation and hormonal imbalance.[6] Similarly, a 2018 study at a tertiary hospital in Nepal reported a PCOS prevalence of 9.18%, aligning closely with the global average of around 10%.[7] PCOS has no definite cure, and while treatments aim to manage symptoms, many cases remain undiagnosed due to low public awareness. A study in India found that only 78 out of 428 college students had heard of PCOS.[8] Similarly, a study in Pakistan revealed inadequate knowledge, attitudes, and perceptions about PCOS among undergraduate students.[9]

A pre-experimental study among 70 adolescent girls in a senior secondary school in Haryana, India, found that a structured teaching programme (STP) significantly improved knowledge about Polycystic Ovary Syndrome. The mean knowledge score increased from 11.5 ± 1.998 (pre-test) to 19.97 ± 2.27 (post-test), indicating the effectiveness of the STP.[10] Likewise, a quasi-experimental study done among 60 adolescent girls in Rajasthan found that a structured teaching programme significantly improved knowledge about PCOD, with mean scores increasing from 18.32 (pretest) to 23.38 (posttest).[11]

However, in Nepal, a study at Nepal Medical College found that final-year MBBS students and interns had satisfactory knowledge and a positive attitude and practice toward PCOS.[12] Undergraduate female students, being in the reproductive age group, are at risk of PCOS but may not recognize the symptoms, making awareness essential. Few studies have assessed PCOS knowledge or the impact of structured education among this group. Educating them can promote early detection, informed health choices, and long-term well-being. Thus, the objective of this study was to assess the effectiveness of a structured teaching programme on PCOS among undergraduate female students.

METHODS

This was a pre-experimental one group pre-test post-test study which was conducted from September 9, 2024 to October 2, 2024 among 141 undergraduate female students studying different programs in selected colleges under Tribhuvan University in Pokhara Metropolitan City. The colleges were Kalika Multiple Campus, Institute of Forestry Pokhara Campus and Lakecity College and Research Centre. The required sample size for the study was calculated by using Cochran's formula[13] and the sample size was 152. Of the 152 students who took the pretest, 141 completed the posttest, resulting in a 92.76% response rate. Those absent on the posttest day were excluded from the study.

Probability stratified random sampling was used to select the sample. As per the University Grants Commission report (2079/80), there were 29 Tribhuvan University colleges in Kaski District, Pokhara. After excluding 3 health-related colleges, 26 were categorized into community (15), constituent (3), and private (8) colleges. Using probability stratified disproportionate random sampling via lottery method, 3 colleges were selected: 1 college from community category (Kalika Multiple Campus), 1 college from constituent category (Institute of Forestry) and 1 college from private category (Lakecity College and Research Centre). In the lottery method, the names of all colleges in each stratum (community, constituent, and private) were written on separate slips of paper and mixed thoroughly. One slip was then randomly drawn from each stratum without looking. The colleges whose names were selected became the study sites. This ensured that every college within a stratum had an equal chance of being selected. Subsequently, undergraduate female students from various faculties (Bachelor in Business Studies, Bachelor in Education, Bachelor of Science in Forestry and Bachelor of Arts in Social Work) who were available during the data collection period at the selected colleges were included in the study.

A structured self-administered questionnaire was developed based on an extensive literature review and expert consultation. It included two parts: Part I covered students' background information, and Part II assessed knowledge on polycystic ovarian syndrome (PCOS), including anatomy and physiology of ovary and PCOS-introduction, definition, incidence, risk factors, etiology, clinical features, diagnosis, treatment, management, effects and prevention. The tool contained 23 items with a total score of 76, where each correct response carried a score of one (1) and every incorrect or unanswered item was accorded zero (0), after converting into percentage it was categorized as inadequate (<50%), moderately adequate (50–75%), and adequate (>75%) knowledge.[14] The content validity of the instrument was ensured through literature review and consultation with six subject matter experts, one endocrinologist, one gynecologist and four faculties of midwifery nursing, with scale content validity index (S-CVI) scores for relevance at 0.99 (average) and 0.95 (UA), and for clarity at 0.96 (average) and 0.86 (UA). Pretesting was conducted with 21 undergraduate female students from Kanya Campus, Pokhara-3. The reliability, assessed using Cronbach's alpha, was 0.86.

A structured teaching programme on polycystic ovarian syndrome (PCOS) was developed by the researchers based on American College of Obstetricians and Gynecologists (ACOG) guidelines, standard gynecology textbooks (DC Dutta's, Shaw's, Modern Gynecology), extensive literature review, consulting with subject experts and advisors in the field of women's health and gynecology. The content covered ovarian anatomy and physiology, and various aspects of PCOS including its definition, incidence, risk factors, causes, symptoms, diagnosis, treatment, management, effects, and prevention.

The study was carried out in three phases. Pre-intervention phase included pretest which was started by collecting data from three colleges. Data was collected by administering structured self-administered questionnaire to the students in their respective classes where each student took about 20 minutes to fill the questionnaire. Immediately after the completion of pretest, intervention phase was started where educational package on polycystic ovarian syndrome was administered to the students. The educational package was a single session of 50 minutes that was given to two colleges in a single day, with remaining one college being covered following next day. To make the teaching program effective a variety of teaching and learning methods were employed such as lecture method, audio-visual aids, power-point and videos were used to make the teaching program effective. In the post-intervention phase, posttest was conducted after four weeks by using same structured questionnaire to the same students who participated in the pretest for evaluation for the effect of teaching programme. After posttest, brochures about PCOS was distributed to each student involved in the study.

The biases were minimized in this study by clearly defining the selection criteria and transparent about the process along with the selection of colleges and students by using probability stratified random sampling technique.

Data analysis

The collected pretest and posttest data were checked for completeness and accuracy. The obtained data were coded and entered in Epi Data version 3.1 and exported to Statistical Package for Social Science (SPSS) version 16 for further analysis. Descriptive statistics such as frequency, percentage, mean and standard deviation were used to describe background variables and other variables. Inferential statistics paired t-test was used to assess effectiveness of structured educational programme and chi-square test was used to assess the association between pretest knowledge level and selected variables. The level of significance was considered at 5% level of significance.

Ethical considerations

The study was conducted after obtaining ethical approval from Institutional Review Committee (Ref.No. 83 (6-11) E2 081/082) of Tribhuvan University (TU), Institute of Medicine (IOM) and institutional permission from three colleges. Prior to data collection, written informed consent was taken from the undergraduate students with information of nature of the study and their role in research. The objective of the study, confidentiality and autonomy declared before starting the survey. Anonymity was maintained by using code numbers. Confidentiality was maintained by not disclosing the information with others and by using the information only for research purpose.

RESULTS

Out of 141 female students, the mean age was 20.74 ± 1.59 years. Most were unmarried 131(92.9%) and from Brahmin/Chhetri ethnicity 77(54.6%). Majority lived in urban areas 103(73%) with 36.2% in their third year. Nearly half 66(46.8%) were B.Sc. Forestry students and 113(80.1%) had regular menstrual cycles.

The study revealed 77(54.6%) of the students reported PCOS as presence of multiple cysts in the ovaries which was increased to 117(83.0%) after teaching program. Likewise, most of the students 128(90.8%) answered obesity as risk factors of PCOS and 126(89.4%) students responded to irregular ovulation as causes of subfertility after educational intervention. Similarly, the study found 104(73.8%) students who responded irregular menstrual period as common experience of women with PCOS was increased to 132(93.6%) after teaching program. More than half, 58(41.1%) of students answered insulin hormone increases in women with PCOS and obesity and 131(92.9%) responded acne as skin changes in PCOS after teaching program. (Table 1)

Table 1: Knowledge on meaning, risk factors and causes of subfertility in PCOS (N=141)

Correct Responses	Teaching Programme	
	Before n(%)	After n(%)
In PCOS, there is presence of multiple cysts in the ovaries	77(54.6)	117(83.0)
Risk factors**		
Obesity	90(63.8)	128(90.8)
Lack of physical exercise	51(36.2)	103(73.0)
Unhealthy diet	90(63.8)	114(80.9)

Genetics	94(66.7)	100(70.9)
Environmental pollutants	20(14.2)	58(41.1)
Family history of PCOS	79(56.0)	105(74.5)
Causes of Subfertility in PCOS**		
Irregular ovulation	117(83.0)	126(89.4)
Imbalance in hormones	84(59.6)	92(65.2)
Improper use of insulin hormone	9(6.4)	65(46.1)
Having multiple cysts in ovaries affect egg release	91(64.5)	108(76.6)
Symptoms of PCOS**		
Irregular periods	137(97.2)	137(97.2)
Infertility	97(68.8)	107(75.9)
Weight gain	83(58.9)	113(80.1)
Excessive hair growth on the face or body	42(29.8)	108(76.6)
Acne and oily skin	66(46.8)	118(83.7)
Hair loss	31(22.0)	83(58.9)
Irregular menstrual period is commonly experienced by women with PCOS	104(73.8)	132(93.6)
Insulin hormone is increased in women with PCOS and obesity	44(31.2)	58(41.1)

**Multiple responses

Similarly, 101(71.6%) of students before and 125(88.7%) after teaching program reported there is no cure for PCOS but different treatments are available to help manage its symptoms. Likewise, 98(69.5%) of students answered hormonal birth control pills is commonly used for managing PCOS and 125(88.7%) students responded women with PCOS can become pregnant but they may need medical help for irregular ovulation and 138(97.9%) answered regular exercise as the preventive measures of PCOS after teaching program. (Table 2)

Table 2: Knowledge on treatment and preventive measures of PCOS (N=141)

Correct Responses	Teaching Programme	
	Before n(%)	After n(%)
Treatment of PCOS		
No cure but different treatments are available to help manage its symptoms	101(71.6)	125(88.7)
Hormonal birth control pills are commonly used for managing PCOS	59(41.8)	98(69.5)
Preventive measures**		
Regular exercise	133(94.3)	138(97.9)
Maintaining a balanced diet	120(85.1)	130(92.2)
Avoiding excessive sugar intake	68(48.2)	104(73.8)
Maintaining a healthy weight	106(75.2)	120(85.1)
Managing stress levels	76(53.9)	108(76.6)
Taking regular gynecological consultation	97(68.8)	106(75.2)
Lifestyle measures**		
Yoga, meditation	128(90.8)	135(95.7)
Less refined carbohydrates	42(29.8)	74(52.5)
Fiber diet	59(41.8)	100(70.9)
Vegetable and fruits	116(82.3)	122(86.5)
Good sleeping pattern	85(60.3)	115(81.6)
Recommended foods**		
Green leafy vegetables	133(94.3)	133(94.3)
Almonds	92(65.2)	110(78.0)
Eggs	83(58.9)	105(74.5)
Fish	63(44.7)	111(78.7)
Strawberries	38(27.0)	100(70.9)
Sweet potatoes	30(21.3)	84(59.6)
Tomatoes	26(18.4)	86(61.0)

**Multiple responses

Figure 1 shows that the education level of students increased from 11(7.8%) to 67(47.5%) after teaching program indicating a significant improvement. (N = 141)

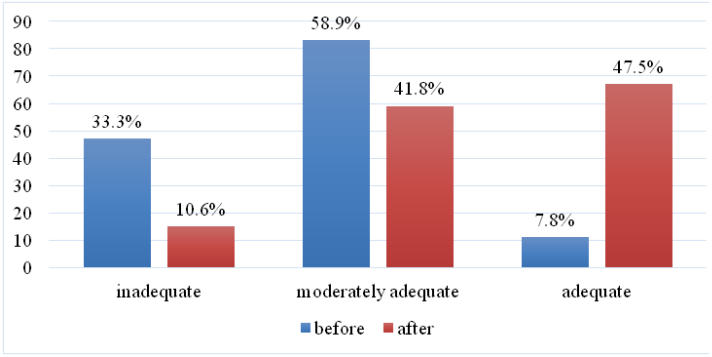

Figure 1: Level of knowledge on PCOS before and after teaching programme

The study revealed the teaching programme was highly effective on increasing students' knowledge as evidenced by significant difference in total score of knowledge with regard to pre and posttest. (Table 3)

Table 3: Comparison of knowledge on PCOS before and after teaching programme (N=141)

Knowledge	Mean ±SD	95% Confidence Interval for Mean		Mean Difference	t-value	p-value
		Lower	Upper			
Before educational programme	43.81±9.316	42.26	45.36	12.390	14.903	<0.001*
After educational programme	56.20±12.475	54.12	58.28			

Paired t-test, *significant at p<0.05

There was statistically significant association between students' pretest level of knowledge and their faculty i.e. students from Bachelor of Science in Forestry faculty had moderate to adequate knowledge than others. However, there was no significant association between pretest level of knowledge and other variables. (Table 4)

Table 4: Association between pretest level of knowledge on PCOS and selected variables (N=141)

Variables	Pretest Level of Knowledge		χ^2	p-value
	Inadequate n(%)	Moderate to Adequate n(%)		
Age in completed years				
<20	20(29.9)	47(70.1)	0.697	0.404
≥20	27(36.5)	47(63.5)		
Religion				
Hindu	40(33.1)	81(66.9)	0.029	0.864
Buddhist/Christian/Muslim	7(35.0)	13(65.0)		
Residence				
Urban	33(32.0)	70(68.0)	0.288	0.591
Rural	14(36.8)	24(63.2)		
Faculty				
Bachelor of Science in Forestry	16(24.2)	50(75.8)	4.615	0.032*
Others	31(41.3)	44(58.7)		
Menstrual cycle pattern				
Regular	38(33.6)	75(66.4)	0.022	0.881
Irregular	9(32.1)	19(67.9)		
Family history of PCOS				
Yes	6(50.0)	6(50.0)	-	0.214[f]
No	41(31.8)	88(68.2)		
Attended PCOS awareness program				
Yes	3(42.9)	4(57.1)	-	0.686[f]
No	44(32.8)	90(67.2)		

[f] Fisher's exact test, χ^2- Chi square, *Significant at p<0.05 level, Others- Bachelor of Business Studies/Bachelor of Arts in Social Work/Bachelor of Education

DISCUSSION

The present study was a pre-experimental research design which was conducted among 141 undergraduate female students from selected colleges of Pokhara, designed to assess the effectiveness of structured teaching programme on polycystic ovarian syndrome among undergraduate female students. This study highlighted that before teaching programme the knowledge of undergraduate female students on PCOS was insufficient where 47(33.3%) of students have inadequate knowledge, 83(58.9%) have moderate knowledge and very few 11(7.8%) have adequate knowledge on PCOS. This finding was consistent to a study done among adolescent girls in Uttarkhand, India which showed 26(43.3%) had poor knowledge, 29(48.4%) had average knowledge and 5(8.3%) had good knowledge.[15] Similarly, the findings were in line with another study conducted in Lucknow, India[16] among young women which revealed 34(48.6 %) had poor knowledge, 35(50%) had average knowledge and 1(1.4%) had good knowledge on PCOS. However, this finding was inconsistent with a study conducted among adolescent girls in Thiruvananthapuram, India which showed 8(10%) had poor knowledge, 56(70%) had average knowledge and 16(20%) had good knowledge.[17]

The study findings concluded that knowledge of students were sufficiently increased after the structured teaching programme on PCOS which showed that very few 15(10.6%) have inadequate, 59(41.8%) have moderate and almost half 67(47.5%) have adequate level of knowledge. This finding was consistent with the study done among adolescent girls in Moradabad, India which showed 24% had inadequate knowledge, 34% had moderate knowledge and 42% had adequate knowledge after administration of planned teaching programme on knowledge regarding polycystic ovarian syndrome.[16] However, this finding was inconsistent with a study done in New Delhi, India among adolescent girls which showed 36(60%) of adolescents girls had good knowledge, 24(40%) had average knowledge and none of them had poor knowledge in posttest.[18] Similarly, another study conducted among adolescent girls in Haryana, India which revealed 48(69%) had adequate knowledge, 22(31%) had moderate knowledge and none of them had inadequate knowledge in post-test.[12]

This study shows that the overall knowledge mean of the students after teaching programme was 56.20±12.47 which was higher than the knowledge score of students before teaching programme (43.81±9.31). Further, paired t-test was done which showed significant association between students' knowledge before and after teaching programme at p value <0.001, exhibiting that the teaching programme was highly effective on student's knowledge. This finding was consistent with the result of a study done in Madhya Pradesh India[19] which showed highly effectiveness of planned teaching programme with posttest knowledge mean 17.64±3.13 in compare to pretest which was 9.67±1.84. Similar to this finding another study done among adolescent girls in Jaipur, India showed that overall pretest and posttest knowledge mean were 18.32±6.13 and 23.38±6.69 with significant at the level of p value <0.05.[11] Likewise, another study done by [20] in Uttarakhand, India among adolescent girls also showed effectiveness of educational programme (p<0.05) with posttest knowledge mean 22.55±3.57 and pretest knowledge mean 11.13±3.32.

Since the study was conducted only among undergraduate female students of selected colleges under Tribhuvan University, so the findings of the study might not be generalized with other settings. In addition, the use of pre-experimental research design threats the internal validity of the study due to lack of control group.

CONCLUSIONS

This study concludes that structured teaching program on polycystic ovarian syndrome used in this study is found to be effective in increasing the level of knowledge of undergraduate female students on polycystic ovarian syndrome. Therefore, awareness and interaction program can be conducted by colleges to enhance students' knowledge and promote proactive health behaviors.

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AUTHORS' CONTRIBUTIONS

AG and BG reviewed the literature and conceptualized the study. AG carried out data collection. AG and BG were responsible for data analysis, interpretation and preparation of results. AG and BG drafted the manuscript, which was reviewed and approved.

REFERENCES

1. World Health Organization. Fact sheets Polycystic ovary syndrome. World Health Organization; 2023. Available from https://www.who.int/news-room/fact-sheets/detail/polycystic-ovary-syndrome [Accessed 7th June 2026].
2. The Lancet Regional Health-Europe. Polycystic ovary syndrome: What more can be done for patients? Lancet Reg Health Eur. 2022;3(21):100524. DOI: 10.1016/j.lanepe.2022.100524 PMID: 36406775.
3. Salari N, Nankali A, Ghanbari A, Jafarpour S, Ghasemi H, Dokaneheifard S, et al. Global prevalence of polycystic ovary syndrome in women worldwide: A comprehensive systematic review and meta-analysis. Arch Gynecol Obstet. 2024;10(3):1303-14. DOI: 10.1007/s00404-024-07607-x PMID:38922413.
4. Patil M. The prevalence of PCOS in South Asia. Fertility & Reproduction. 2023;05(04):190. DOI: 10.1142/S2661318223740043
5. Kodipalli A, Devi S. Prediction of PCOS and mental health using Fuzzy Inference and SVM. Frontiers in Public Health. 2021;30(9):789569. DOI: 10.3389/fpubh.2021.789569 PMID: 34917583.
6. Joshi AM, Yonzon P, Tandukar S. Clinical profile of patients with polycystic ovarian syndrome in Nepal. Endocrinol & Metab Int J. 2017;4(2):50-52. DOI: 10.15406/emij.2017.04.00083
7. Kc S, Shah RK, Singh A, Prasai A, Bhandari B, Aryal S, et al. Prevalence of polycystic ovarian syndrome among medical students of a tertiary care hospital. J Nepal Med Assoc. 2020;58(225):297–300. DOI: 10.31729/jnma.4885 PMID: 32538921.
8. Jakhar R, Sen ED, Dutt R. Awareness of polycystic ovarian syndrome among college going females in Gurgaon: A cross-sectional study. Annals of the National Academy of Medical Sciences (India). 2022;58(03):149–56. DOI: 10.1055/s-0042-1750359
9. Rizvi M, Islam MA, Aftab MT, Naqvi AA, Jahangir A, Ishaqui AA, et al. Knowledge, attitude, and perceptions about polycystic ovarian syndrome, and its determinants among Pakistani undergraduate students. PLoS ONE. 2023;18(5):e0285284. DOI: 10.1371/journal.pone.0285284 PMID: 37228116.
10. Dahiya P, Kumar P, Chongtham S, Kaur S. A pre-experimental study to assess the effectiveness of structured teaching programme on knowledge regarding polycystic ovarian syndrome among the adolescent girls in selected senior secondary school of Haryana. IJSR. 2024;13(1):1413–416. DOI: 10.21275/SR24123164355
11. Acharya M. A study to assess the effectiveness of structured teachingprogramme on knowledge regarding polycystic ovarian disease among adolescent girls in selected school, Jaipur (Rajasthan). GFNPSS- IJMR. 2023;4(3):2199-205. DOI: 10.46376/ijmr/04.03.2023
12. Adhikari P, Bhattarai J. Knowledge, attitude and practice regarding polycystic ovarian syndrome (PCOS) among final year medical students and interns in a medical college in Kathmandu Nepal. Jour of Diab and Endo Assoc of Nepal. 2023;7(1):4-12. DOI: 10.3126/jdean.v7i1.57452
13. Cochran WG. Sampling Techniques. 3rd edition. New York: John Wiley & Sons; 1977 [internet]. Available from: https://www.scirp.org/reference/ReferencesPapers?ReferenceID=1390266 [Accessed 20th June 2024].
14. Sonja JN. A quasi experimental study to assess the effectiveness of planned teaching programme on knowledge regarding polycystic ovarian syndrome among adolescent girls in selected girls inter college, in

Moradabad. IJRESM. 2021;4(2):154-58. Available from: https://journal.ijresm.com/index.php/ijresm/article/view/538 [Accessed 21th June 2024].

15. Joshi D, Bisht S, Panwar S, Negi P, Dharwan A, Pal A, Ramola D, et al. Effectiveness of planned teaching programme on knowledge regarding polycystic ovarian disease among adolescent girls of Sursinghdhar, New Tehri, Uttarkhand, India. Int J Community Med Public Health. 2021;8(12):5832-836. DOI: 10.18203/2394-6040.ijcmph20214574

16. Rajni, Dubey S, Deo S. Effectiveness of informational module regarding polycystic ovarian syndrome on knowledge among young women of selected college at Lucknow. IJSR. 2020;9(9): 980-84. DOI: 10.21275/SR20915150549

17. Seethu PL. Effect of structured teaching programme on knowledge regarding polycystic ovarian syndrome among girls studying in Government Higher Secondary Schools. IJSDR. 2023;8(7): 493-498. Available from:https://www.ijsdr.org/viewpaperforall.php?paper=IJSDR2307071 [Accessed 20th June 2024].

18. Avarachan M, John G. Effectiveness of structured teaching programme in terms of knowledge of adolescent girls regarding polycystic ovarian syndrome and prevention of its complications in selected senior secondary school. Int J Nurs Midwifery Res. 2019;6(1):28-32. DOI: 10.24321/2455.9318.201907

19. Batra B, Tiwari S. An experimental study to assess the effectiveness of planned teaching programme on knowledge of adolescents' girls of higher secondary school age group (14-17 years) regarding polycystic ovarian syndrome at Vijaya Raje Government Girls School, Ujjain, Madhya Pradesh. Trends in Nurs Adm Edu. 2018;7(2):4–11. DOI: 10.24321/2348.2141.201803

20. Rawat S, Gomathi B, Kumar L, Mahalingam V. Structured teaching programme on knowledge about polycystic ovarian syndrome among adolescent girls. Int J Res Med Sci. 2017;5(11):5004–8. DOI: 10.18203/2320-6012.ijrms20174960