

# Effectiveness of Planned Teaching Program Regarding Polycystic Ovarian Disease in Terms of Knowledge and Attitude among Students of SGT University

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## Abstract

**Background:** The modernized technology has changed the daily lifestyle of human beings. An unhealthy eating habits and lack of exercise leads to occurrence of many diseases among adolescence. The current study is here about the common disease i.e. polycystic ovarian disease (PCOD) among women which cause to improper diet or hormonal balance this is due to lack of knowledge and irregular exercises.

**Objectives:** The objectives of the study have drawn to fulfill the research reflecting on the effectiveness of planned teaching programme regarding polycystic ovarian disease (PCOD) in terms of knowledge and attitude among students of SGT University, Gurugram

**Materials and Method:** In this study Pre-Experimental design was used to assess the effectiveness of planned teaching programme in terms of knowledge and attitude regarding polycystic ovarian disease (PCOD). Convenience sampling technique was used to select 60 students of SGT University, Gurugram. A structured was administered to assess the knowledge and attitude. The collected data was analyzed by using descriptive and inferential statistics.

**Results:** The comparison of pre and post test of knowledge score on polycystic ovarian syndrome to assess the effectiveness of planned teaching programme improving the knowledge regarding polycystic ovarian syndrome among 60 students. The mean pre-test is 9.38 and post-test knowledge score 26.62 having a significant difference with t value for knowledge is 12.85 at the level of significant  $p < 0.05$ .

**Conclusion:** It is concluded that that the planned teaching program was effective in improving the knowledge and attitude regarding PCOD among students of SGT University.

Therefore, it is recommended that precautionary measures can be adopted by female such as doing regular exercises to prevent PCOD for better health and each woman should have proper knowledge regarding PCOD in order to take prevention timely.

**Keywords:** Polycystic Ovarian Disease (PCOD), Planned Teaching Program (PTP), Knowledge and attitude)

## Introduction

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Adolescent period is a unique period where there is a change from childhood to adulthood, a time of physiological, psychological, social and emotional adaptation. During this period individual attains physical

and sexual maturity, whereas emotional maturity will be imbalanced. The changes in adolescent period have important implications to understand the health risks associated with this syndrome. During this period, the body changes and there will be development of secondary sex characteristics. Any difference of secondary sex characteristics can inversely affect the physical and emotional adaptation of the adolescent.<sup>1</sup>

For an adolescent female, the development of a daily menstrual cycle is an essential phase. The challenge is to discern between common human differences and actual endocrine or organic issues. Avoiding premature interference too early without the absence of sufficient anomalies requires a firm knowledge of the physiological sexual growth mechanism as well as the signs and causes of related abnormalities<sup>2</sup>.

The word polycystic suggests multiple cysts, and as of clusters of thin, pearl size cysts in ovaries, Polycystic ovarian syndrome (PCOS) gets its name. These cysts are bubbles (called follicles) packed with fluid containing eggs that have not yet been released owing to hormonal imbalance<sup>3</sup>.

Polycystic ovarian syndrome is a complex systemic condition that has to be treated consistently by them for the remainder of their lives.<sup>7</sup> Polycystic ovarian syndrome is a disease that may affect the menstrual cycle of a woman, pregnancy, hormones and features of her appearance.<sup>4</sup>

Polycystic ovary syndrome (PCOS) is a widespread endocrine condition that affects about 6% of women of reproductive age, characterised by gynecological and endocrine symptoms, including chronic ovulation, infertility and hyperandrogenism.<sup>5</sup> It has been reported that the prevalence of PCOS is 5-10% of women of reproductive age in the general population. The population of 26,626,765 in India is affected by polycystic ovarian disease.<sup>6</sup>

While the most concern by physicians has remained to the treatment of particular indications related to

PCOS to date, it is flatterer more and more clear that a variety of metabolic and other effects to women's wellbeing may have to be faced in the near future due to the severity of the syndrome. In the entire life span of infertile women, PCOS tends to have a long prodrome period with detectable anomalies. Around 25% to 30% of women with PCOS will show reduced tolerance to glucose by the age of 30, and 8% of pretentious women will grow type 2 diabetes annually.<sup>9</sup> Women with PCOS are shown by angiography to have more severe coronary artery disease<sup>10</sup>. In these women, hypertension is often seen more often<sup>7</sup>. Chronic anovulation predisposes women to endometrial cancer, and emerging research connects ovarian and breast cancer with more and more PCOS<sup>8</sup>.

### Objective

- 1) To assess the point prevalence of polycystic ovarian syndrome among students.
- 2) To assess the pre-test knowledge and attitude regarding PCOD.
- 3) To develop and implement planned teaching program regarding PCOD.
- 4) To assess post-test knowledge and attitude adopted regarding PCOD.
- 5) To find out association between post-test knowledge and attitude regarding polycystic ovarian syndrome with selected demographic variables.

### Methodology

**Research Design:** Pre-experimental one group pretest and posttest design, where only the experimental group is selected as the study subject. A pretest observation of the dependent variables (Knowledge and Attitude) is made before implementation of the selected group. Planned teaching programme (PTP) regarding polycystic ovarian disease (PCOD) is administered and finally a posttest observation of dependent variables is carried out to assess the effectiveness of planned teaching programme (PTP) on the group.

| Group              | Pretest        | Treatment | Post test      |
|--------------------|----------------|-----------|----------------|
| Experimental Group | O <sub>1</sub> | X         | O <sub>2</sub> |

**Key: O<sub>1</sub> - Pre-Test, X- Planned teaching , O<sub>2</sub> - Post Test**

**Research setting :** Shree Guru Gobind Singh Tricentenary University, Gurugram (Haryana).

**Population of the study:** Students studying in Shree Guru Gobind Singh Tricentenary University, Gurugram. Convenience sampling technique was used to select 60 students of SGT University, Gurugram.

**Inclusive criteria:** Students studying in SGT University as a student and Students who are available at the time of data collection. **Exclusive criteria :** Students who are not willing to participate in the study. Content validity of tool was done by various experts in the field.

#### Tools for data collection

The study has used primary data collection method. The data collection is done with the help of pre-structured and pre-tested questionnaire.

**Section A:** Selected demographic variables like age, professional qualification, attended any previous education programme on polycystic ovary syndrome. **Section B:** Structured questionnaire to assess knowledge regarding polycystic ovary syndrome. **Section C:** Likert scale to assess attitude, regarding polycystic ovary syndrome. **Section D:** Planned teaching programme on polycystic ovary syndrome.

#### Pilot study

Pilot study was conducted in Faculty of Physiotherapy among 2<sup>nd</sup> year students to find the practicability and feasibility of the research. The study was conducted in the month of January for a period of 7 days. Formal permission was obtained from Dean of Faculty of physiotherapy were selected convenience sampling technique and consent form was distributed to students and they were given pre-test followed PTP on 7<sup>th</sup> day post-test was done. The data was analyzed using descriptive and inferential statistics. The study signified

improvement in post-test results regarding polycystic ovarian disease (PCOD) in terms of knowledge and attitude among students. This shows that the study was feasible and practicable.

#### Data collection procedure

Permission was obtained; from the Dean' of different faculty, authority for conducting the research in SGT University and before giving the questionnaire self introduction , the purpose of study was mentioned by the investigator and consent was obtained . The demographic variables were collected from the students. The pre-test was done with the prepared tool and planned teaching programme was administered immediately after the pre-test. The post test of study was carried out after the completion of one week, using the same tools as pre-test. Collected data was then tabulated and analyzed .

#### Result & Discussion

The demographic profile of study participants is shown in Table 1. Prevalence of Polycystic ovarian disease according to the age group is shown in figure 2. Result of pre test reveals that 78% students having poor knowledge and 22% having average knowledge regarding polycystic ovarian syndrome. After the planned teaching in post test it revealed that 77% were having excellent knowledge regarding polycystic ovarian syndrome while 23% were having good knowledge regarding this disease.

**The comparison of pre and post test of knowledge score on polycystic ovarian syndrome** to assess the effectiveness of planned teaching programme improving the knowledge regarding polycystic ovarian syndrome among students reveals that The mean pre-test is 9.38 and post-test knowledge score 26.62 having a significant difference with t value for knowledge is 12.85 at the level of significant  $p < 0.05$ .

The association which found significant at 0.05 level between post test knowledge score regarding polycystic ovarian syndrome among students with selected demographic variables such as age of adolescent age.

Figure 1: Demographic variables of subject

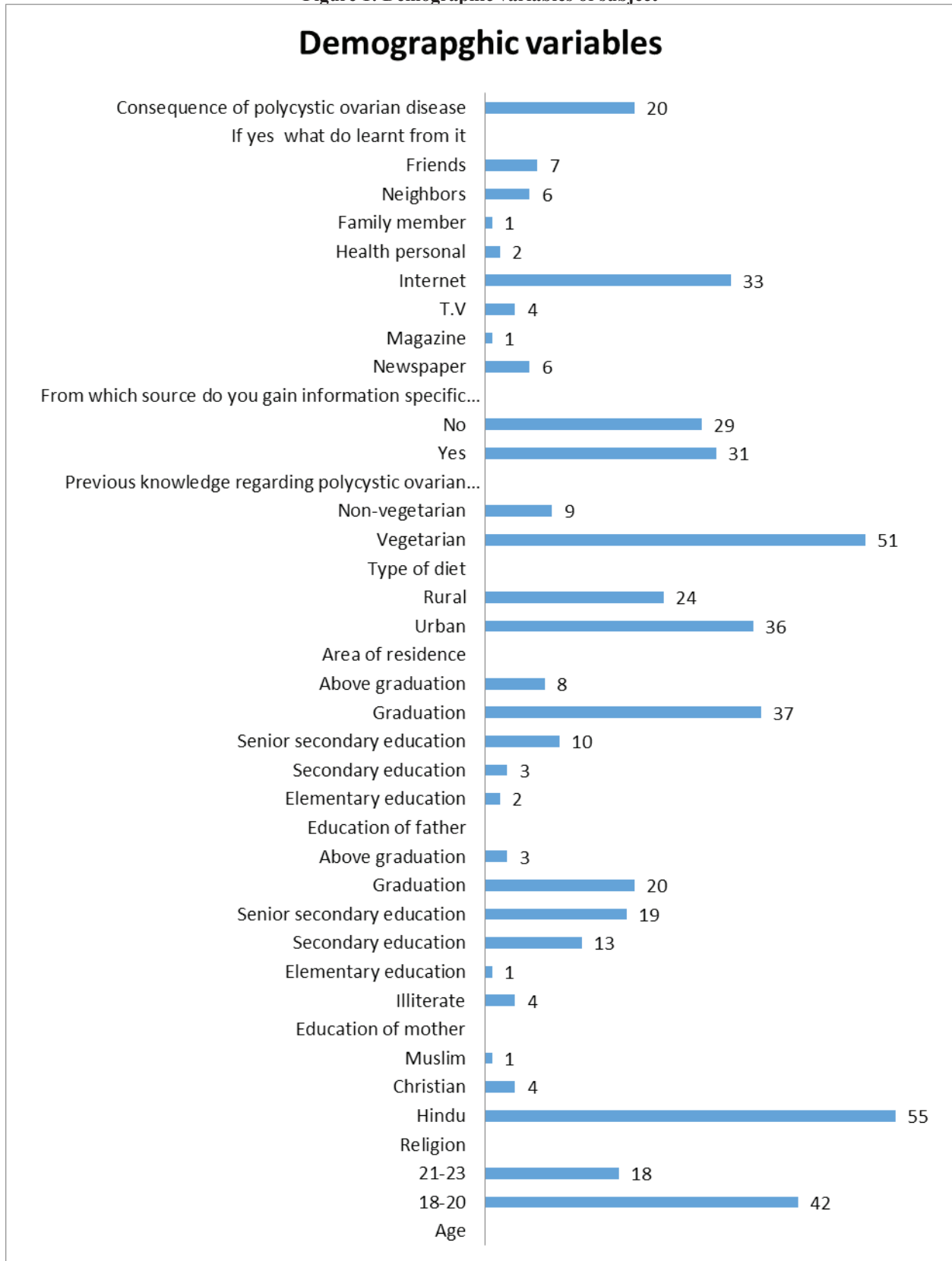


Fig 1: Prevalence of Polycystic ovarian disease according to the age group

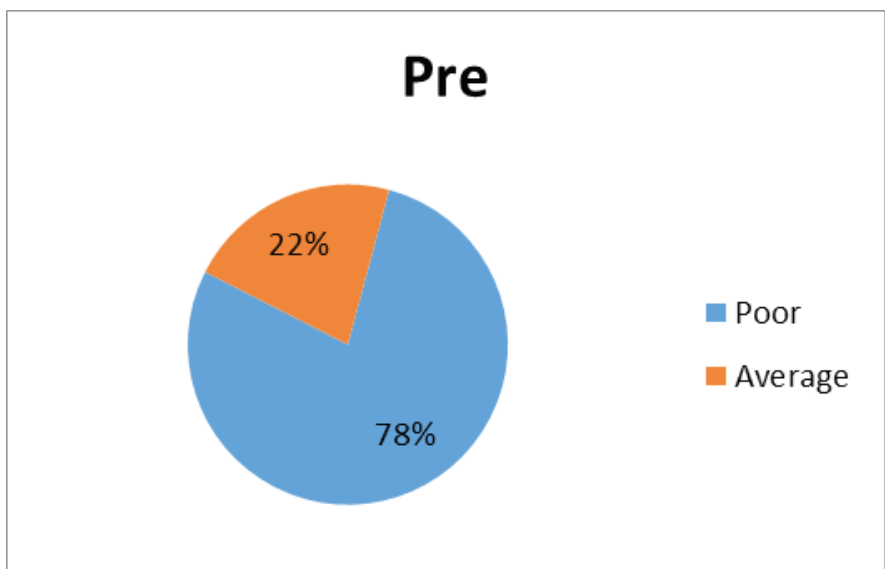
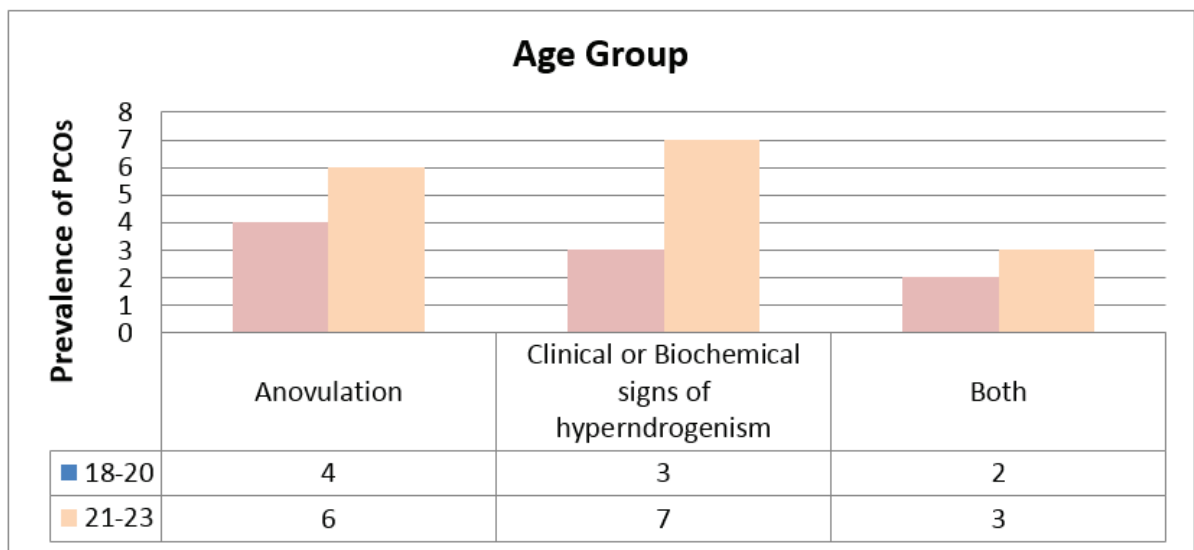


Figure No.2 Percentage distribution of pre-test knowledge regarding polycystic ovarian syndrome among students

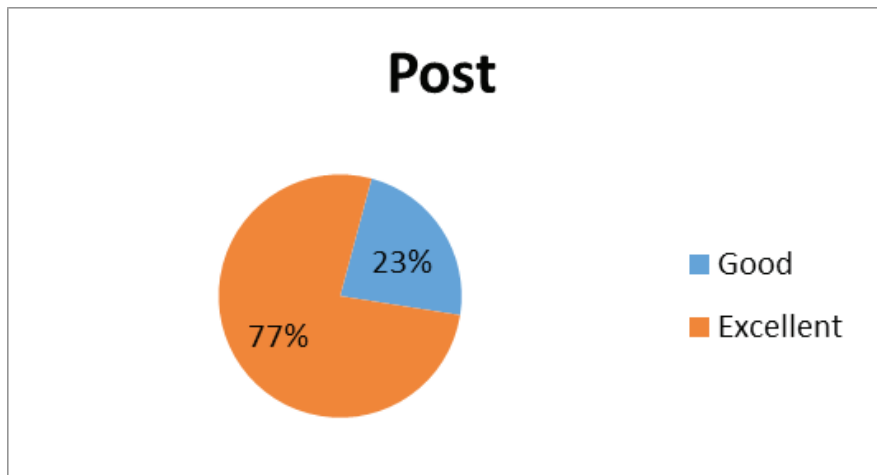


Figure No. 3 Percentage distribution of post-test knowledge regarding polycystic ovarian syndrome among students

**Result of Pre test attitude reveals that PCOS is a hormonal condition that women can get during their childbearing years** 6.7% students were strongly agree, 21.7% were agree, 31.7% were neutral, 25% were disagree and 15% were strongly disagree. **Women having PCOS can't conceive** 3.3% students were strongly agree, 31.7% were agree, 35% were neutral, 15% were disagree and 15% were strongly disagree. **Women with PCOS tend to have higher level of androgen** 1.7% students were strongly agree, 15% were agree, 25% were neutral, 38.3% were disagree and 25% were strongly disagree. **Women with PCOS have multiple ovarian CYST** 0% students were strongly agree, 1.7% were agree, 5% were neutral, 48.3% were disagree and 45% were strongly disagree. **PCOS is linked to the development of other medical conditions like, type 2 diabetes, high BP, and heart disease** 5% students were strongly agree, 6.7% were agree, 30% were neutral, 33.3% were disagree and 25% were strongly disagree. **The basic treatment to control PCOS is life style and exercise** 0% students were strongly agree, 3.3% were agree, 11.7% were neutral, 55% were disagree and 30% were strongly disagree. **Hirsutism and acne are most common symptom in PCOS** 3.3% students were strongly agree, 0% were agree, 18.3% were neutral, 38.3% were disagree and 40% were strongly disagree. **PCOS is a common health problem caused by an imbalance of reproductive hormones** 1.7% students were strongly agree, 6.7% were agree, 8.3% were neutral, 56.7% were disagree and 26.7% were strongly disagree. **Extra male hormone disrupt the menstrual cycle with PCOS** 5% students were strongly agree, 20% were agree, 21.7% were neutral, 43.3% were disagree and 10% were strongly disagree. **Women with PCOS can get pregnant using fertility treatments** 1.7% students were strongly agree, 15% were agree, 33.3% were neutral, 35% were disagree and 15% were strongly disagree. **PCOS cause frequent period with excessive flow** 8.3% students were strongly agree, 18.3% were agree, 23.3% were neutral, 31.7% were disagree and 18.3% were strongly disagree. **Diagnosis is biased on ovarian cyst only** 6.7% students were strongly agree, 8.3% were agree, 43.3% were neutral, 31.7% were disagree and 10% were strongly disagree.

## Conclusion

The PCOD which is a very common problem among women due to lack of awareness and knowledge it spreads actively among women which gives rise to heart diseases, high blood pressure and so on. The existing revealed that implantation of planned teaching program among students is a precautionary measure.

Similarly, Results of this study suggested that the planned teaching program was effective in improving the knowledge regarding PCOD among students of SGT University and association between post-test knowledge and attitude with demographic variable gives significant change in preventing the Polycystic Ovarian Disease.

## Recommendation

The following recommendations are done based on this study:

- The similar study can be conducted with large samples for better generalization.
- A comparative study can be conducted to assess the knowledge and attitude regarding weight reduction among women with PCOS.
- A study can be conducted to assess the knowledge, attitude and practice on women with PCOS regarding weight reduction exercises.

**Ethical Clearance-** Taken from SGT Ethical committee

**Source of Funding-** Self

**Conflict of Interest -** Nil

## References

1. Ehrmann DA. Polycystic ovarian syndrome. N.Engl J Med. 2005; 352: 1223- 31 2.
2. Homburg R. The management of infertility associated with polycystic ovary syndrome Reproductive Biology and Endocrinology. 2003;1:109
3. Myles. Text book of Midwives. 15th Edition, Elsevier Publication. 2007.p.177
4. Dutta D.C. Textbook of Gynaecology. 5th Edition, New Central Book Agency publication; 2006. P.

- 268-282.
5. Roberts feidman. "Understanding PCOD" VI Edition. New Delhi. Grew Hill Publishers 2004.p.274-285.
  6. Community living of Minnesota. Minnaeapolis USA Jan. 2005. d.17(1): 41-50.
  7. Newsletter on "natural health solutions for polycystic ovarian syndrome" [www.ovarian-cysts-pcos.com](http://www.ovarian-cysts-pcos.com).
  8. Sesbanti G, Rekha D, Sibani S.A profile of adolescent girls with gynaecological problems. J ObstetGynecol India 2005 Jul/Aug;55(4):353-5.