

Title of the Paper:**Retrospective Analysis of Prescriptions of Polycystic Ovary Syndrome and its Complications**

1. Name of the Corresponding author: Mrs. R. Kavitha

Designation: Assistant Professor

Institute name: JKKMMRF'S Annai JKK Sampoorani Ammal
College of Pharmacy

2. Name of the Corresponding author: Ms. A. Lalitha

Designation: Assistant Professor

Institute name: JKKMMRF'S Annai JKK Sampoorani Ammal
College of Pharmacy

3. Name of the co-author: Mrs. P. Ragavi

Designation: Assistant Professor

Institute name: JKKMMRF'S Annai JKK Sampoorani Ammal
College of Pharmacy

4. Name of the author: Dr. A. Venkatesh

Designation: Assistant Professor

Institute name: JKKMMRF'S Annai JKK Sampoorani Ammal
College of Pharmacy

Abstract:

Aim: To determine the prescription analysis of polycystic ovary syndrome and its complication in retrospective method.

Method: The Retrospective analysis of polycystic ovary syndrome and its complication observational study was conducted in the Department of pharmacology. Totally 120 patients were divided in to two groups. Group-A Married consist 40 patients with the treatment of letrozole tablet

and Group-B Unmarried consist of 80 patients with the treatment ethinyl estradiol tablet. The complication was evaluated like Backpain, irregular periods, unwanted hair growth in face, obesity, miscarriage, delay of pregnancy Outcome Score questionnaire were used to assess complication. The study subjects were followed once in 30 days for 3 months and they were asked to answer the same questionnaire. All results were analysed using computerized statistical package of graph Pad instant Version.

Result

Among 120 patients were in the age group of 18-24 years, 65 % (78) were in the age group of 25 – 48 years, 35 % (42). A total of 120 PCOS patients, 57% (68) were in normal body weight, 43% (52) were in over body weight, A total of 120 PCOS patients, 33% (40) were in Letrozole, 67% (80) were in Ethinyl estradiol. A total of 120 PCOS patients, 3% (2) were in Diabetes, 4% (2) were in Cardiac disease, 15 % (18) were in Anti-anxiety, 12.5 % (15) were in Depression, 20.8 % (25) were in Obesity, and 56.6 % (58) were in Menstrual irregularities. A total of 120 PCOS patients, 92% (110) were in Regular periods and, 95.8% (115) were in Irregular periods. A total of 120 polycystic ovary syndrome patients, 67% (80) were in Unmarried, 33% (40) were in Married.

Conclusion

According to our survey, pcos patients can be Stay at a healthy weight. Weight loss can lower insulin and androgen levels. It also may restore ovulation. Improving the daily routine like walking, exercise, Be active. Exercise helps lower blood sugar levels and modification in food style pcos patients took Limit carbohydrates. High-carbohydrate diets might make insulin levels go higher. This may prevent from pcos in early stage.

Keywords: Polycystic Ovary Syndrome, Hormonal imbalance, Infertility, Endocrine disorder

Introduction

The most frequent endocrine-metabolic condition in women of reproductive age is polycystic ovary syndrome (PCOS), which is a disorder that affects a lot of people. ⁽¹⁾ At the moment, PCOS is the most common factor in women's menstrual difficulties. Clinical and/or biochemical hyperandrogenism, atypical ovulation, and enlarged and/or polycystic ovaries visible on ultrasound scans or more tiny bubbles positioned circumferentially and/or ovarian volume > 10 mL) are its defining characteristics. It is a risk factor for the onset of diabetes and cardiovascular illnesses and frequently coexists with overweight or obesity dyslipidaemia, hyperinsulinemia, and

hypertriglyceridemia (CVDs). The predominant symptom determines how PCOS patients are treated. ⁽²⁾

Aim and objectives

Aim:

To determine the prescription analysis of polycystic ovary syndrome and its complication in retrospective method.

Objectives:

1. To assess the 1% of people having the complication of polycystic ovary syndrome.
2. To compare polycystic ovary syndrome complication between married and unmarried.

Plan of Study

1. Identification of target area for polycystic ovary syndrome prescription analysis
2. Literature review
3. Survey of polycystic ovary syndrome complication queries
4. Obtaining consent from the patients
5. Data collection
6. Analysis of data
7. Interpretation and reporting the results.

Method of study:

Study plan

The study was retrospective method.

Study site

The study was carried out in the department of pharmacology at Vivekanandha pharmacy college for women, Sankari, Salem.

Inclusion criteria:

Patients with 18 to 48 years of age.

Both married and unmarried

Patients are Prescribed with Letrozole
Patients undergoes with polycystic ovary syndrome.

Exclusion criteria:

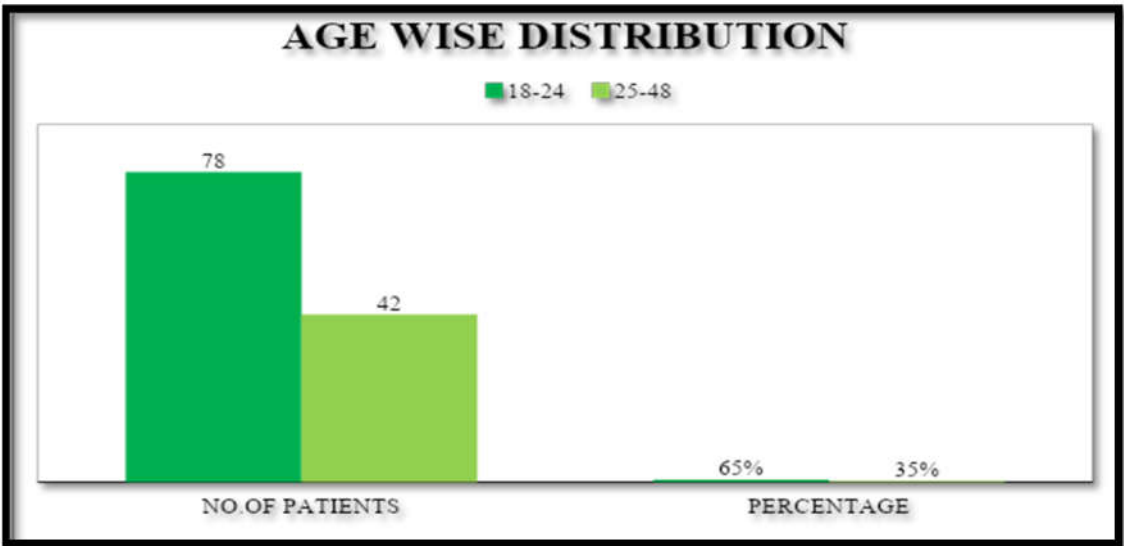
Patients with irregular menstrual cycle
Severe back pain and abdominal pain.
Married women with obesity.

Figure 1: Age wise distribution among the study population

Among 120 patients were in the age group of 18-24 years, 65 % (78) were in the age group of 25 – 48 years, 35 % (42). (Table 1, Figure 1)

Table 1: Age wise distribution among study population (n = 120)

S.No	Age (Years)	No. of Patients	Percentage
1	18-24	78	65%
2	25-48	42	35%



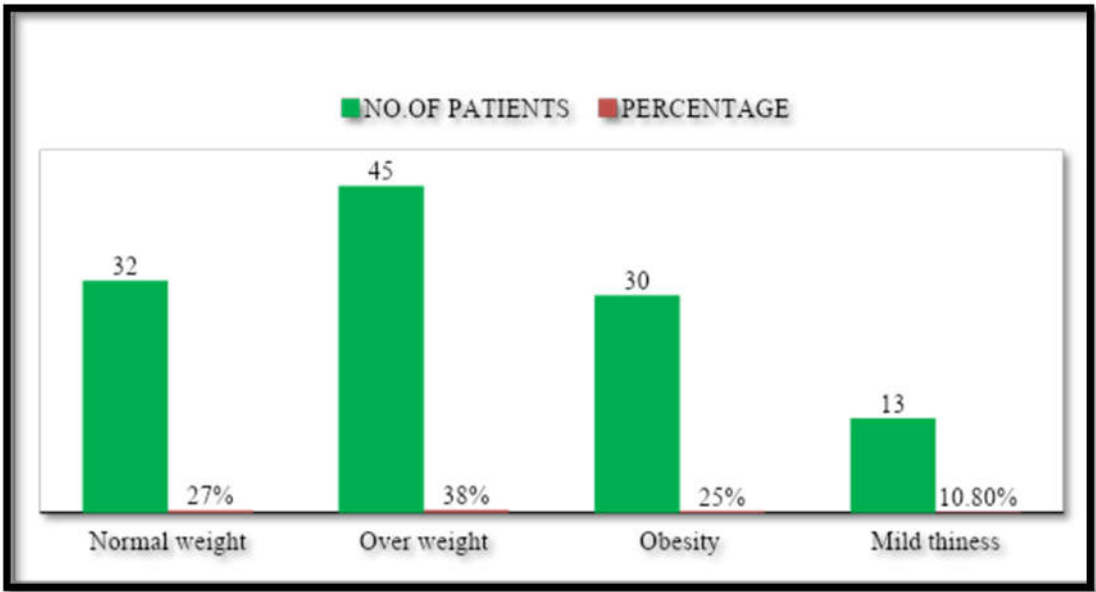
Age wise distribution among study population (n = 120)

Figure 2: Body mass index (BMI) among the study population (n = 120)

A total of 120 polycystic ovary syndrome patients, 57% (68) were in normal body weight, 43% (52) were in over body weight. (Table 2, Figure 2)

Table 2: BMI among the study population (n = 120)

S.No	BMI	No. of Patients	Percentage
1	Normal weight	32	27%
2	Over weight	45	38%
3	Obesity	30	25%
4	Mild thinness	13	10.80%



Body mass index (BMI) among the study population (n = 120)

Figure 3: Classes of drugs among the study population (n = 120)

A total of 120 PCOS patients, 33% (40) were in Letrozole, 67% (80) were in Ethinyl estradiol (Table 3, Figure 3)

Table 3: Classes of drugs among the study population (n = 120)

Class of Drugs	No. of Patients	Percentage
Letrozole	40	33%
Ethinyl estradiol	80	67%

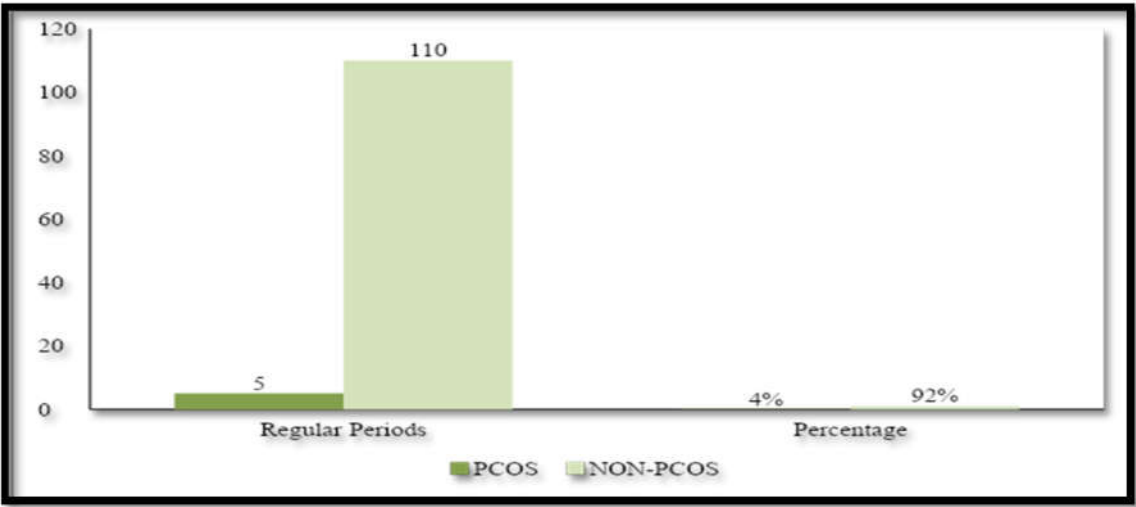


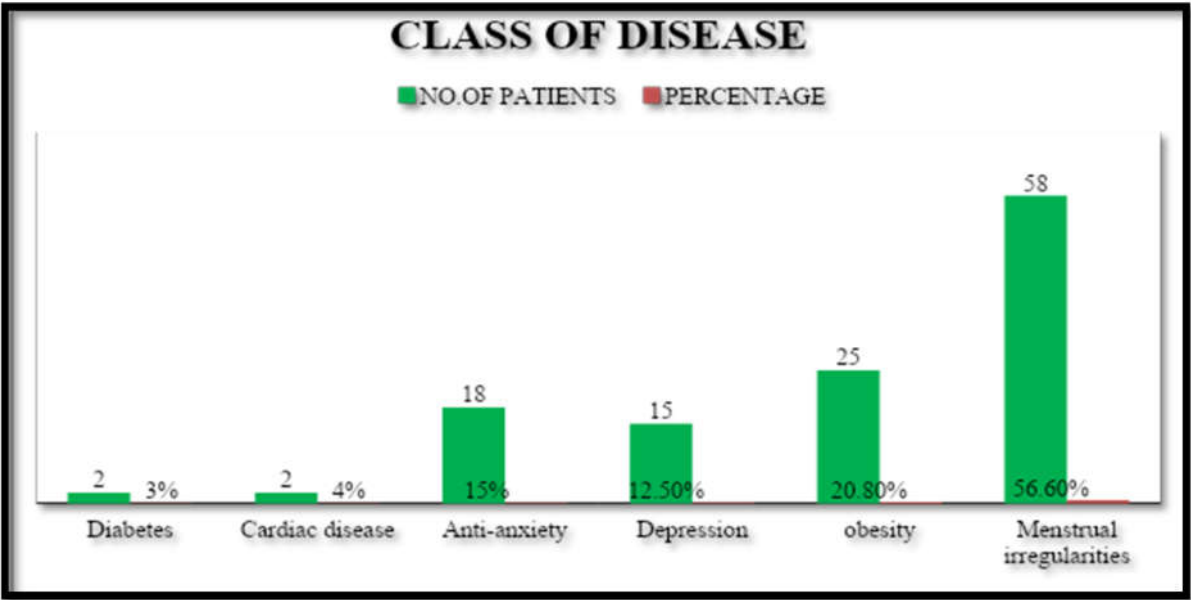
Figure 3: Classes of drugs among the study population (n = 120)

Figure 4: Classes of disease among the study population (n = 120)

A total of 120 PCOS patients, 3% (2) were in Diabetes, 4% (2) were in Cardiac disease, 15 % (18) were in Anti-anxiety, 12.5 %(15) were in Depression, 20.8 %(25) were in Obesity, and 56.6 %(58) were in Menstrual irregularities. (Table 4, Figure 4)

Table 4: Classes of disease among the study population (n = 120)

S.No	Classes Of Disease	No. Of Patients	Percentage
1	Diabetes	2	3%
2	Cardiac disease	2	4%
3	Anti-anxiety	18	15%
4	Depression	15	12.50%
5	Obesity	25	20.80%
6	Menstrual irregularities	58	56.60%



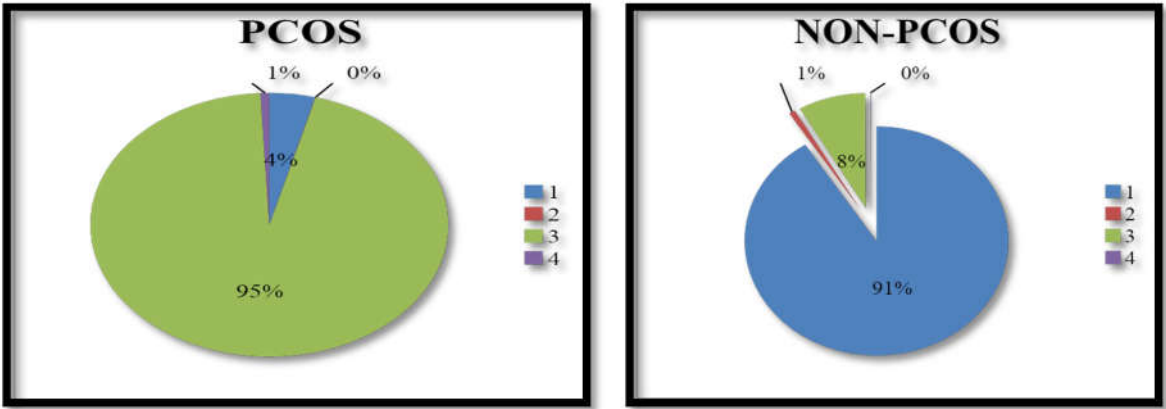
Classes of disease among the study population (n = 120)

Figure 5: Prediction of pcos nd non – pcos patients among the study population (n = 120)

A total of 120 PCOS patients, 92% (110) were in Regular periods and, 95.8% (115) were in Irregular periods. (Table 5, figure 5)

Table 5: Prediction of pcos and non – pcos patients among the study population (n=120)

S.No	Prediction	Regular Periods	Percentage	Irregular Periods	Percentage
1	PCOS	5	4%	115	95.80%
2	NON-PCOS	110	92%	10	8.30%



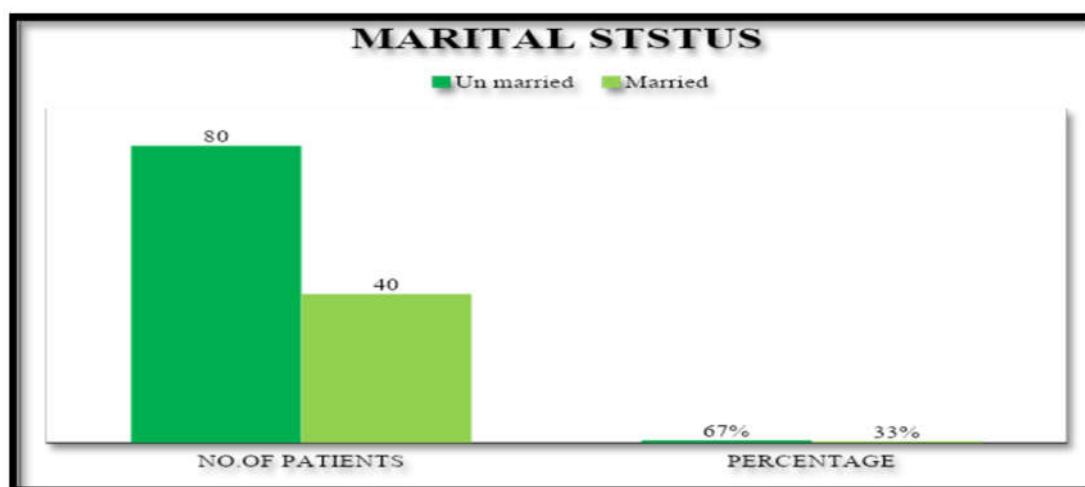
Prediction of PCOS and non – PCOS patients among the study population (n=120)

Figure 6: Marital status among the study population (n = 120)

A total of 120 PCOS patients, 67% (80) were in Unmarried, 33% (40) were in Married.

Table 6: Marital status among the study population (n = 120)

S.No	Marital Status	No.of Patients	Percentage
1	Married	40	33%
2.	Un Married	80	67%



Marital status among the study population (n = 120)

Discussion

This study describes the Prescription analysis of PCOS Patients and its complication in a total 120 Patients. The present study showed that number of married women 40 (33%) were Unmarried women 80 (64%) and this was in accordance with the previous study of Kulkarni Dhananjay et al (2013) that on overall higher prevalence. Unmarried patients were (64%). Age wise distribution among the study population were in 120 PCOS patients, 65% (78) were in the age group of 18 – 24 years, 35% (42) were in the age group of 25 – 48 years.

Conclusion

The present study showed that pcos was treated with letrozole for married patient, and unmarried patient was treated with ethinyl estradiol. The main aim of this project is, prescription analysis of pcos patients and its complication was faced by the patients,

As per the study, 65% patients were affected by pcos in the age of (18-24) and 35% patients were affected by pcos in the of age (25-48). According to BMI, 38% of pcos patients were caused due to overweight. most of the people have irregular period due to pcos when compared to non-- pcos people, during pcos patients may cause lot of diseases condition like 3% of patients with diabetes and ,4% with cardiac disease, 12.50% with obesity, 15%with depression.

According to our survey, pcos patients can be Stay at a healthy weight. Weight loss can lower insulin and androgen levels. It also may restore ovulation. Improving the daily routine like walking, exercise, Be active. Exercise helps lower blood sugar levels and modification in food style pcas patients took Limit carbohydrates. High-carbohydrate diets might make insulin levels go higher. This may prevent from pcas in early stage.

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