

PERCEPTION AND ADHERENCE TOWARDS ALLOPATHIC AND AYURVEDIC MANAGEMENT OF POLYCYSTIC OVARY SYNDROME AMONG FEMALES: A CROSS-SECTIONAL SURVEY

Bhawna Pant¹, Anuj Nautiyal^{2*}

¹ Research Scholar, Department of Pharmacy Practice, School of Pharmaceutical Sciences, Shri Guru Ram Rai University, Patelnagar, Dehradun, Uttarakhand, India, 248001.

^{2*} Associate Professor, Department of Pharmacy Practice, School of Pharmaceutical Sciences, Shri Guru Ram Rai University, Patelnagar, Dehradun, Uttarakhand, 248001, India.

*Corresponding Author: Dr. Anuj Nautiyal, Associate Professor, Department of Pharmacy Practice, School of Pharmaceutical Sciences, Shri Guru Ram Rai University, Patelnagar, Dehradun, Uttarakhand, 248001, India
Email: anujnautiyal@rediffmail.com

ABSTRACT

Polycystic Ovary Syndrome (PCOS) is a chronic endocrine disorder requiring long-term management. Patient perception and adherence significantly influence treatment outcomes. The objective of this study is to assess treatment patterns, adherence, perceived effectiveness and switching behaviour among females with PCOS in Dehradun. The cross-sectional study using a self-reported questionnaire-based survey was conducted among 166 females aged 15–40 years. Descriptive statistics and chi-square tests were employed to analyse the data. Combined therapy was most commonly reported (53.0%), followed by Allopathic (29.5%) and Ayurvedic therapy (17.5%). Irregular adherence occurred among 65.7% of participants. 44% of respondents reported improvement, while 56% reporting no change. Treatment switching was observed in 64.5% of the study population. Our analysis indicate that treatment patterns, adherence and switching behavior are significantly associated ($p < 0.001$), whereas perceived effectiveness was not. Adopting an Integrative approach improves long term PCOS outcomes by enhancing patient perception and treatment adherence.

KEYWORDS: PCOS, Adherence, Treatment Approach, Ayurvedic Treatment, Allopathic Therapy.

INTRODUCTION:

As a widespread endocrine- metabolic conditions, Polycystic Ovary Syndrome (PCOS) affect significant percentage of reproductive- aged women characterized by ovulatory dysfunction, hyperandrogenism and metabolic dysregulation [1]. Largely due to diverse diagnostic definitions and population characteristics, the reported prevalence of PCOS varies widely, affecting 6-20% of women worldwide, [2]. Genetic Predisposition, insulin resistance, hormonal imbalances and lifestyle factors are increasingly recognized as the driving forces behind this multifactorial disorder [3].

Characterized by a various range of symptoms, PCOS includes menstrual irregularities, difficulties in conception, skin issues (acne), unwanted hair growth (hirsutism), obesity and related metabolic issues [4]. Furthermore, it is incorporated with long term complications such as type 2 diabetes mellitus, cardiovascular disorders including anxiety and depression [5]. Long-term therapeutics management strategies are essential because of its chronic and progressive nature.

Allopathic management emphasis on to control symptoms through pharmacological interventions like oral contraceptives, insulin medications, androgen antagonists and Fertility medications [6]. In comparison with their effectiveness, these therapies frequently call for long term use and may be associated with side effects, which can influence patient compliance [7].

On the conflict, Ayurvedic management adopts a holistic approach highlight lifestyle changes, dietary restriction and herbal remedies based on restoring metabolic balance [8]. Ayurvedic medicine widely popular in India, primarily due to its cultural acceptance and find minimal side effects [9]. Treatment selection is often driven by patient perception, accessibility, personal experience and cultural factors [10]. Since PCOS requires long-term therapy management, adherence plays a key role in treatment success, however adherence rate are frequently driven by perceived efficacy and side effects [11]. Although both systems are widely used, there is a limited data

assessing patient reported perception, adherence and switching behaviour. Therefore the current study aims to evaluate these parameters among females with PCOS in Dehradun.

OBJECTIVES:

- To assess treatment patterns among females with PCOS
- To evaluate self-reported adherence to treatment
- To assess perceived effectiveness of therapy
- To evaluate treatment switching behavior

MATERIALS AND METHODS:

Study Design: Cross-sectional survey

Study Population: 166 females

Study Area: Dehradun

Data Collection:

Data were collected using a structured self-reported questionnaire regarding treatment type, adherence behavior, perceived improvement, and switching behavior.

Ethical Consideration:

This study was conducted as an anonymous, voluntary questionnaire-based survey. No personal identifiers or clinical data were collected. Informed consent was obtained from all participants.

Statistical Analysis:

Data were expressed as frequency and percentage. Chi-square (χ^2) test was applied to assess association between categorical variables. A p-value <0.05 was considered statistically significant.

RESULTS:

A study of 166 women with PCOS was conducted in Dehradun to evaluate the treatment patterns, adherence behaviours, perceived effectiveness and treatment switching. The results showed the combined therapy of both Allopathic and Ayurvedic approach was the most preferred treatment modality by 53.0% of the subjects followed by 29.5% on Allopathic treatment alone and 17.5% on Ayurvedic therapy alone signifying a significant preference for integrative management. Though on treatment, the levels of adherence were sub-optimal with majority of the participants (65.7%) reporting irregular adherence and only 34.3% adhering to the treatment regularly which highlights challenges in achieving long-term compliance . In terms of perceived effectiveness, 44.0% of patients reported improvement in their condition, while a greater proportion (56.0%) reported no improvement indicating variability in treatment outcomes and expectations among patients. Further, treatment switching behavior was prevalent with 64.5% of patients reporting change in treatment modality and 35.5% reporting continuation of the same therapy which could be explained by dissatisfaction, perceived side effects or lack of desired outcomes. Chi-square test of association showed significant association for treatment pattern ($\chi^2 = 32.18, p < 0.001$), adherence ($\chi^2 = 16.92, p < 0.001$) and treatment switching ($\chi^2 = 14.06, p < 0.001$) which indicates that these variables were not randomly distributed among participants while perceived effectiveness did not show statistically significant association ($\chi^2 = 2.40, p = 0.121$). In conclusion, the findings show that combined therapy is widely preferred, but adherence to it is inconsistent and treatment switching is common and patient-perceived effectiveness is variable but likely influenced by individual lifestyle and behavioral factors.

Table 1: Treatment Pattern

Treatment Type	Number (n)	Percentage (%)
Combined	88	53.0%
Allopathic	49	29.5%
Ayurvedic	29	17.5%

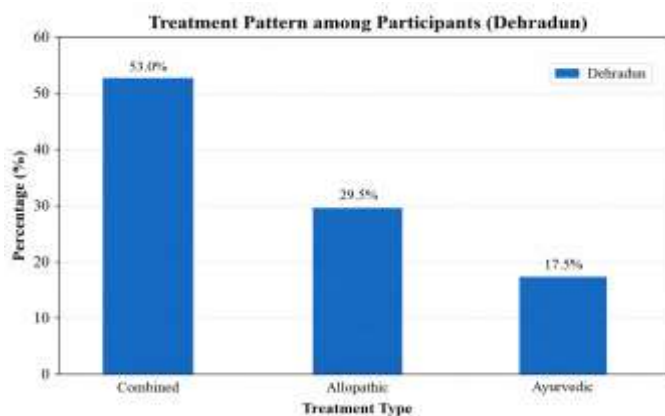


Table 2: Adherence Level

Adherence	Number (n)	Percentage (%)
Regular	57	34.3%
Irregular	109	65.7%

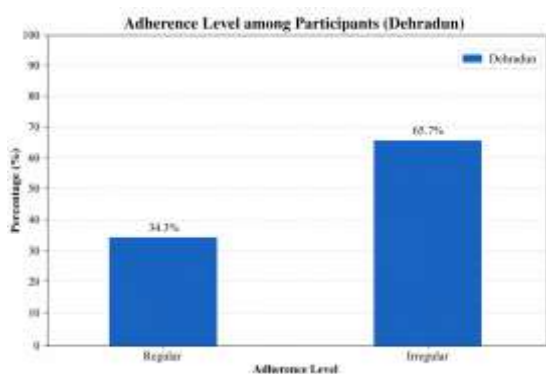


Table 3: Perceived Effectiveness

Response	Number (n)	Percentage (%)
Improvement	73	44.0%
No improvement	93	56.0%

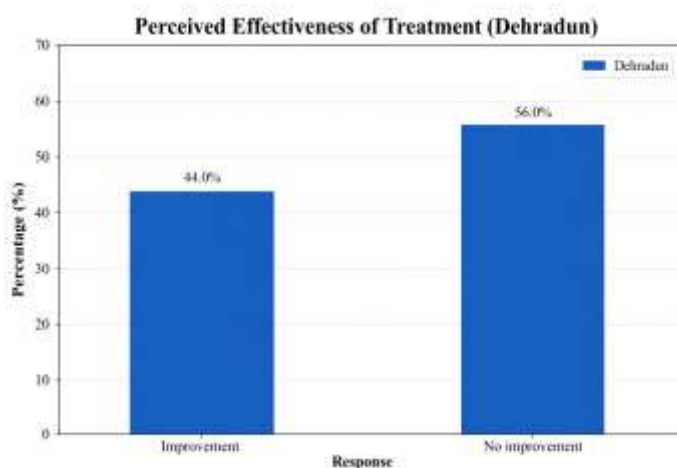


Table 4: Treatment Switching

Response	Number (n)	Percentage (%)
Switched	107	64.5%
Not switched	59	35.5%

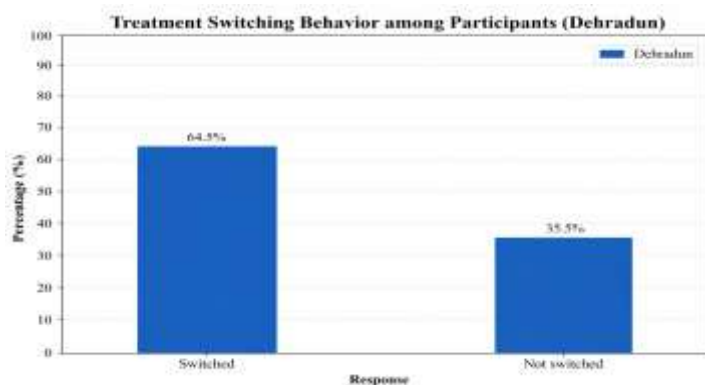


Table 5: Chi-Square Analysis of Variables

Parameter	χ^2 value	p-value	Interpretation
Treatment Pattern	32.18	<0.001	Highly Significant
Adherence	16.92	<0.001	Highly Significant
Perceived Effectiveness	2.40	0.121	Not Significant
Treatment Switching	14.06	<0.001	Highly Significant

DISCUSSION:

This study provides worthwhile information regarding the perception and compliance to treatment of PCOS among females of Dehradun. Most of the participants reported combined therapy as their treatment approach, which shows a preference towards the integrated management. However, the inconsistent adherence in a significant number of participants indicates the challenges in the long-term compliance to treatment. The statistically significant switching behavior indicates dissatisfaction or perceived side effects of treatment, especially of allopathic therapy. Participants reported that while Allopathic treatment may improve menstrual cycle and cyst-related symptoms, recurrence may occur due to lifestyle factors such as dietary variations. Interestingly, perceived effectiveness was not statistically significant, suggesting a variation in the patient perception of improvement, and emphasizes the subjective nature of treatment outcomes in survey-based studies.

CONCLUSION:

Treatment pattern, adherence and switching behavior show statistically significant variations among females with PCOS. However, perceived effectiveness continues to be variable. Improving adherence and encouraging integrative approaches may improve long-term outcomes.

CONFLICT OF INTEREST:

The authors declare no conflicts of interest regarding this study.

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