



ASSESSMENT OF THE IMPACT OF LIFESTYLE MODIFICATION OF WOMEN SUFFERING FROM POLY CYSTIC OVARY SYNDROME

Dave Krishnaben Narendrabhai¹, Dr. Poornima Shrivastav (Professor)²

Department of Food and Nutrition

^{1,2}Sunrise University, Alwar, Rajasthan

Abstract

Polycystic ovary syndrome refers to presence of several cysts or ovaries that seldom mature or produce fertile eggs. PCOS is quite prevalent, particularly among women who are infertile. A hormonal imbalance that results in increased amounts of estrogenic, luteinising hormone & decreased level of Follicle stimulating hormone is called PCOS. The aim of the study is to assess the effect of Lifestyle modification of women suffering from poly cystic ovary syndrome. Methodology used in this study is survey method and Lifestyle management approach. Most of women had their age of menarche b/w 12 to 14 years (66.3%). 11% attained at 16 years. From 113 samples, 5 of women were having excessive hair loss. 62 of them had mild alopecia. Women's average BMI 24.3 dropped to 23.3 after 3 months of LMs, & then to 21.7 after 6 months (a 10.70% drop). Three-sixths of 37 women in study group who made lifestyle changes had their MCs become more regular (about 28 days) after implementing these changes for 6 months. The efficiency here is measured at 94.75%. Modifying one's lifestyle often results in a significant decrease in PCOS symptoms.

Keywords: *Lifestyle modification, Polycystic ovary syndrome, women, fertility*

Introduction

Every woman must have access to understand information on matters relating to women's health, including those pertaining to her many bodily parts not only her reproductive organs (Conrad, 2018). The polycystic ovary syndrome (PCOS) refers to a hormonal issue wherein several 'cysts' are really small, immature follicles that expand ovaries (Yanagihara et al., 2023). Menstrual irregularities & infertility are linked to PCOS because the ovary's thickened & fibrosed layer interferes with ovulation & causes an ovulation & fibrosis. Obesity, excessive hair growth, & acne may all happen (Moron et al., 2020).

The development of next generation is affected by health of women throughout their reproductive & fertile years (which span from 15 to 45 years of age). Worldwide, various chronic disorders, which include ischemic heart disease along with stroke, & also chronic obstructive pulmonary diseases cause 45% of deaths among women due to their lifestyle. Older women often have a variety of health-related issues as a result of threat factors that develop while they are young & as adults. Sedentary habits, smoking, & poor diets are threat factors due to worst lifestyle (Ding et al., 2018).



The first-line therapy for PCOS calls for dietary changes, including food recommendations exercise to lower chance of developing diabetes by promoting weight ratio enhancing glucose tolerance, all of which result in a stable metabolism. Modification of lifestyle, with a focus on dietary changes, better physical activity, occupational therapy, is seen as a crucial part of managing PCOS (Moran et al., 2020). Physical activity is known to increase oxidative metabolism in tissues; also, oxidative metabolism being present in ovary increases follicular development. The management of PCOS involves changing one's lifestyle, with a strong focus on dietary changes, better physical activity, occupational therapy(Joham and Teede, 2022). The aim of the study is to evaluate the impact of Lifestyle modification of women suffering from poly cystic ovary syndrome.

Material and method

A survey is a method of analysis utilised to gather data from a predefined group of respondents in order to obtain knowledge insights into different topics of interest. The Investigator carried out a survey to identify explored prevalence rate of PCOS among childbearing age women.

Lifestyle modifications with Diet exercises

Women having PCOS should first focus on modifying their diet, increasing their level of physical activity, managing their wt. because of correlation b/w OBT&IR. Lifestyle management approach consists of dietary modification exercises, & was helpful in achieving WR.

Data analysis

The statistical approaches were carried out using SPSS for Windows, data was entered in MS-Excel (version 22.0). The variables were described using descriptive statistics for example standard deviation (SD), percentages mean.

Result and Discussion

3.1 Lifestyle modification (LSM)'s impact on PCOS:

Table 1: LSM's impact on PCOS

Parameters	LSM		
	Pre Test	Post Test- 3 Months	Post Test - 6 Months
BMI (Mean)	24.3	23	21.7
WHR (Mean)	0.84	0.82	0.81
Alopecia (Number of persons)			
No	9	12	12
Mild	24	9	21
Moderate	3	6	4



Excessive	1	0	0
Acne (Number of persons)			
Yes	14	0	0
No	16	33	35
May be	7	4	2
Menstrual Duration (Number of persons)			
<26 days	7	0	0
26-30 days	0	0	20
>30 days	30	37	17
Hair Growth (Number of persons)			
≥7	16	14	14
<7	21	23	23

Impact of LSM interventions is depicted in table Table1, discussed in detail below. After adopting a healthier lifestyle, average BMI of a group of women dropped from 24.3 to 23.3 after three months then to 21.7 within six months, a loss of 10.70 percentage points. Allopathic treatment resulted in WR but not a decrease in WHR. Alopecia improved in 3 of 37 women who made lifestyle changes; this represents a 10.81% improvement overcourse of 6 months. Similarly, 17 of 37 patients who made lifestyle changes had a decrease in acne after 3 months, &2 more saw a decrease in acne in months that followed. Forsample size of 37, this corresponds to a decrease in acne of 51.35%. Considering same changes in lifestyle for 6 months, 36 out of 37 women insample were able to normalise their menstrual length to roughly 28 days. A 94.75% success rate is assigned to this.

3.2 Impact of LSM Intervention on PCOS:

3.2.1 BMI:

By LSM intervention as shown in Figure 1, effect of BMI was found to be noticeably increased as there were noticeable reductions in wt. Ofwomen. The mean BMI got reduced by 11.6% which is found to be significant among all three interventions.

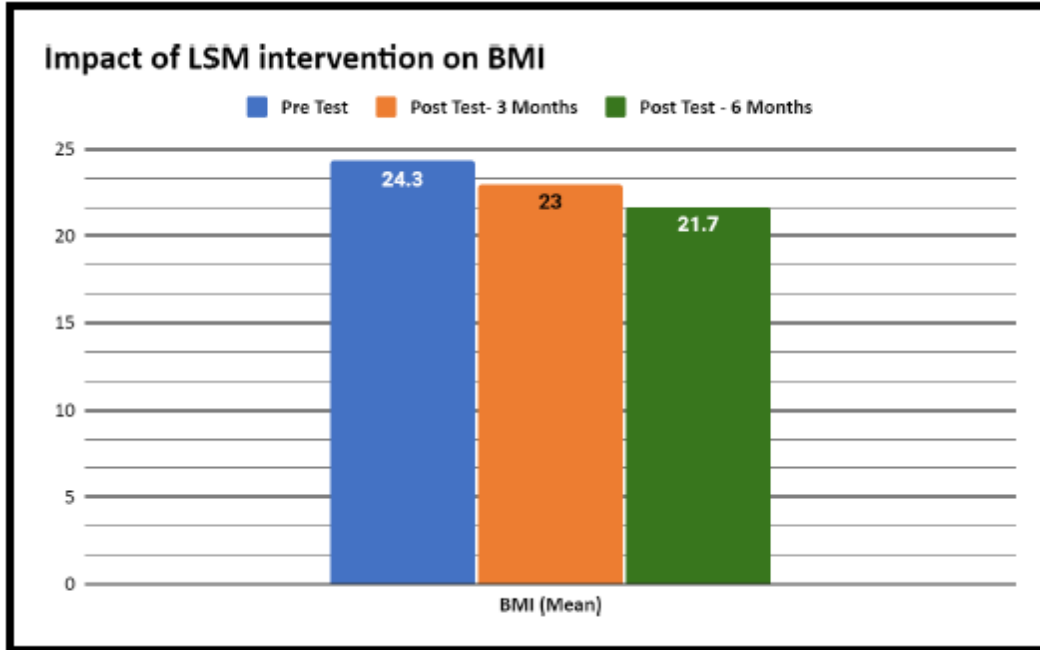


Figure 1: Impact of LSM intervention on BMI

3.2.2 WHR:

There were some noticeable reductions in WC, HC&wt., there is very minimal reduction in WHR found during 6 months period of intervention. Mean WHR value got reduced from 0.84 to 0.81 (3.5%) by following LSM interventions for 6 months as per Figure 2.

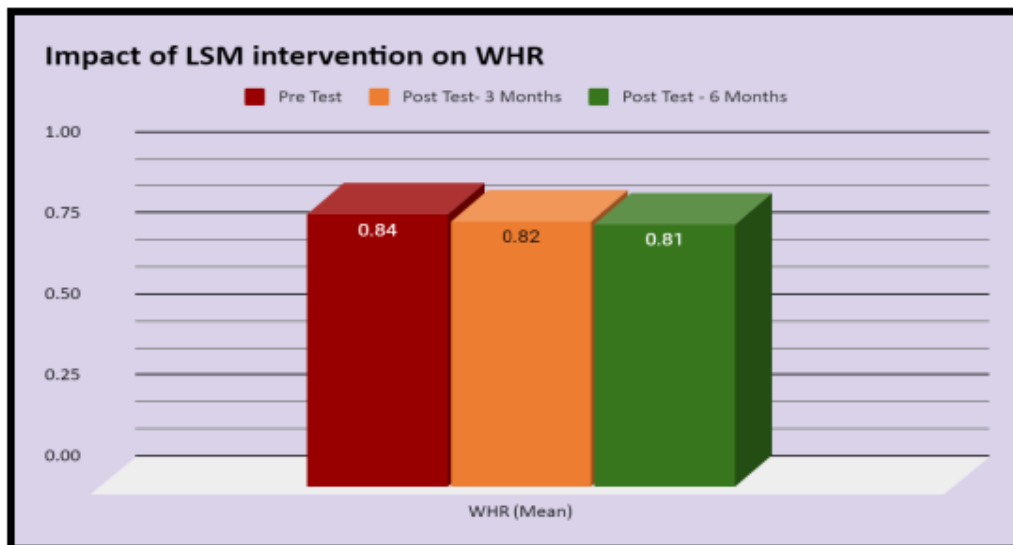


Figure 2: Impact of LSM intervention on WHR

3.2.3ALOPECIA:

Figure 3 shows Impact on alopecia by LSM intervention is found to be effective such that 3 of37 subjects (8.1%) have betterment in Alopecia.

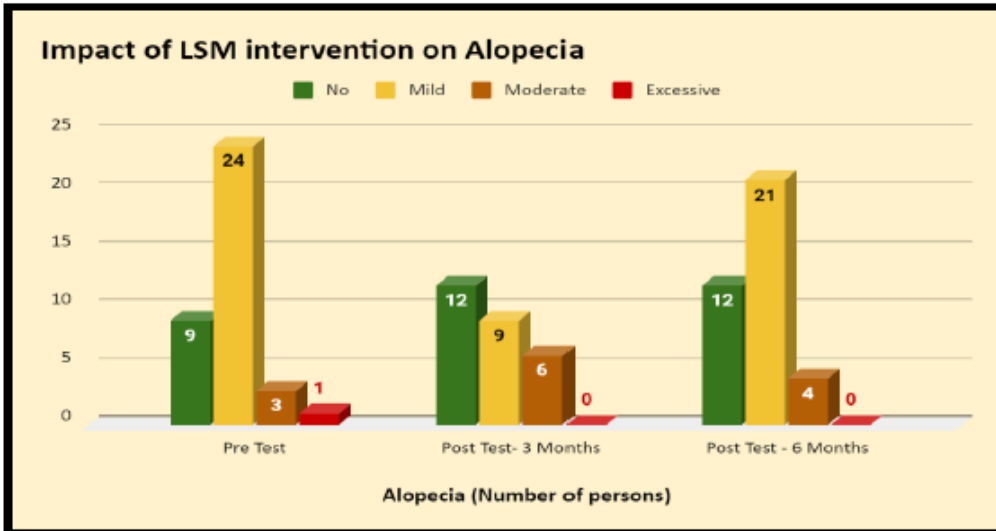


Figure 3: Impact of LSM intervention on Alopecia

3.2.4ACNE:

Impact of LSM intervention on Acne found to be very effective by 51.35% such that 19 out of 37 women who had Acne got reduced with.

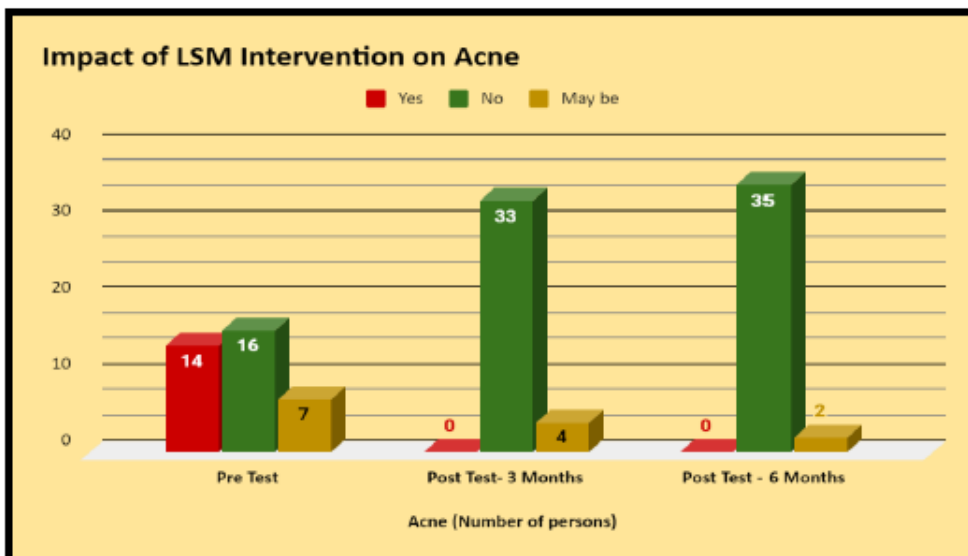


Figure 4: Impact of LSM intervention on Acne

3.2.5 MENSTRUAL DURATION:

In view of reduction on abnormal menstrual duration LSM intervention found to be very effective such that 23 of women got regularized in their menstrual duration which is 54.45% effective as shown in Figure 5.

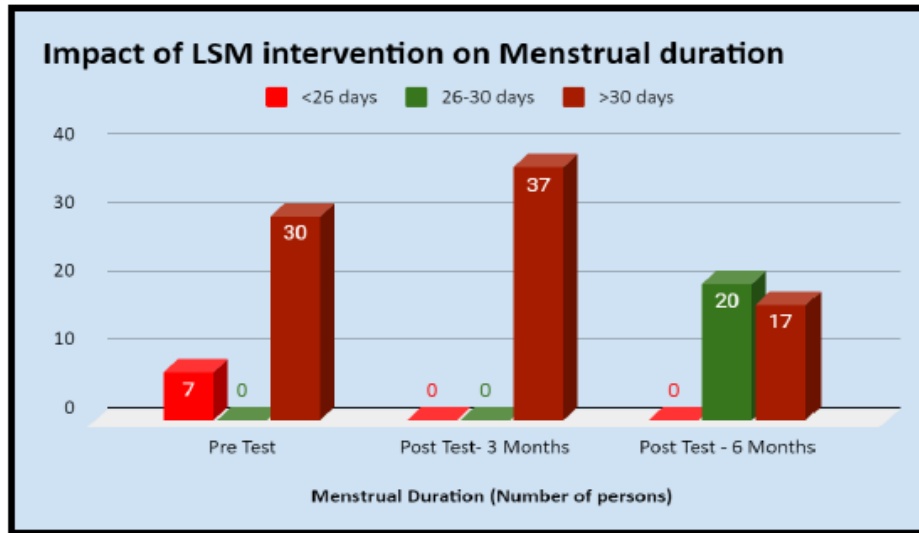


Figure 5: Impact of LSM intervention on Menstrual duration

3.2.6 HAIR GROWTH:

Based on hair growth per Figure 6, LSM intervention found to be having a significant effect on people. Minimal change (6%) in hair growth found in group.

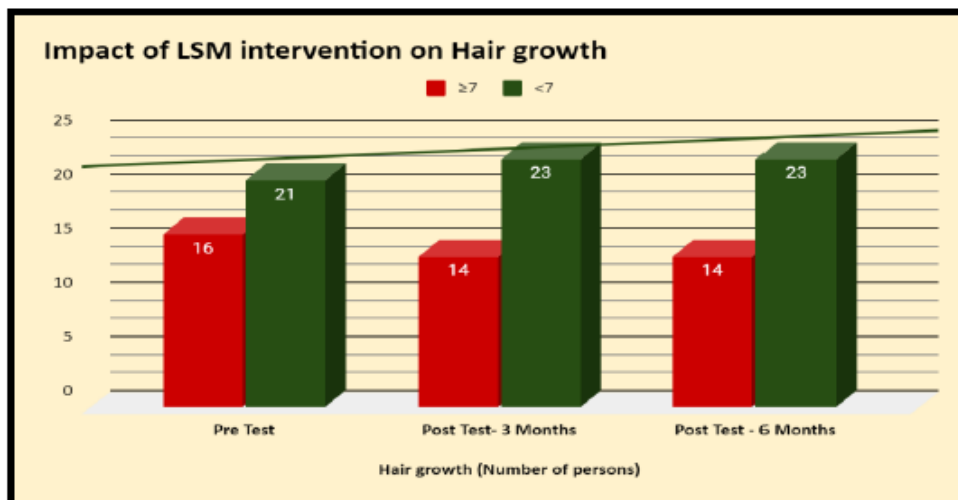


Figure 6: Impact of LSM intervention on Hair growth

Lifestyle intervention is emphasised as major early therapeutic approach for PCOS in IEBG for Assessment & therapeutic of PCOS. Conventionally, "lifestyle interventions" refer to programmes that provide behavioural



assistance to increase either nutritional consumption or physical activity (Moran et al., 2020). To improve overall health, lifestyle management is advised in 2018 PCOS guideline. The guideline also encourages wt. management, which is 1) preventing wt. gain in all women having PCOS, &2) attaining keeping moderate WR in women who are overweight (Joham&Teede et al., 2022). Therefore, encouraging healthy lifestyle changes in women having PCOS, including getting better sleep, may be crucial (Cowan et al., 2023).

Conclusion

Modifying one's way of life to treat PCOS may be seen as an extension of concept of wellness. Preservation of wt. condition assists in reducing symptoms of PCOS & can manage DM. As well, diet foods with huge high-fiber carbs help in controlling blood sugar level & digestive process. Exercise also helps in lowering blood sugar level & shows relief in symptoms.

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