
QUALITY OF LIFE OF WOMEN WITH POLYCYSTIC OVARY SYNDROME AFTER INDIVIDUALIZED HOMOEOPATHIC INTERVENTION ASSESSED USING THE PCOSQ: A RETROSPECTIVE OBSERVATIONAL STUDY

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ABSTRACT

Background: Polycystic Ovary Syndrome (PCOS) is a common endocrine disorder of women of reproductive age that affects not only physical health but also emotional, social and reproductive well-being. Quality of life (QoL) is therefore an important outcome in its management. The Polycystic Ovary Syndrome Health-Related Quality of Life Questionnaire (PCOSQ) is a validated, disease-specific tool for measuring it.

Objective: To assess the quality of life of women with PCOS after individualized homoeopathic intervention by comparing PCOSQ scores before and after treatment.

Methods: A retrospective observational (before and after) study was carried out among 30 women diagnosed with PCOS at the Out-Patient Department of Sarada Krishna Homoeopathic Medical College Hospital, Kulasekharam, over a period of 6 months. Individualized homoeopathic medicines were prescribed on the totality of symptoms. PCOSQ scores before and after treatment were compared using the paired t-test and the Wilcoxon signed-rank test; age, medicine prescribed and potency were analysed descriptively.

Results: The age of the patients ranged from 12 to 39 years, and the largest group (46.7%) was aged 21–25 years. *Sulphur* was the most frequently prescribed medicine (23.3%), and 200C was the most commonly used potency (66.7%). The mean PCOSQ score rose from 3.14 ± 0.33 before treatment to 5.45 ± 0.39 after treatment, a mean gain of 2.31 points (95% CI

2.22 to 2.41; $p < 0.001$). All 30 patients (100%) showed improvement. After treatment, 13 patients (43.3%) had a good quality of life and 17 (56.7%) a relatively good quality of life.

Conclusion: Quality of life of women with PCOS improved significantly during individualized homoeopathic treatment. As there was no control group and one patient given *Sac lac* also improved, the results cannot be attributed with certainty to the medicines; larger controlled studies are recommended.

KEYWORDS: Polycystic Ovary Syndrome; PCOSQ; quality of life; homoeopathy; individualized treatment; retrospective study.

1. INTRODUCTION

Polycystic Ovary Syndrome (PCOS) is one of the most common endocrine disorders affecting women of reproductive age (Azziz et al., 2016; Teede et al., 2018). It was first described by Stein and Leventhal (1935) in women with amenorrhoea, hirsutism and enlarged polycystic ovaries, and is now recognised as a complex endocrine-metabolic disorder characterised by a combination of menstrual irregularity, hyperandrogenism and polycystic ovarian morphology (Rotterdam ESHRE/ASRM-Sponsored PCOS Consensus Workshop Group, 2004). The reported prevalence varies with the diagnostic criteria applied; the World Health Organization estimates that about 8–13% of women of reproductive age are affected and that a large proportion remain undiagnosed (World Health Organization, n.d.). The prevalence is rising in many regions with sedentary lifestyle, changing dietary habits, obesity and stress (Azziz et al., 2016).

Clinically, women present with oligomenorrhoea or amenorrhoea, subfertility due to anovulation, hirsutism, acne and androgenic alopecia, together with central obesity, acanthosis nigricans and dyslipidaemia, and in the long term they are at increased risk of impaired glucose tolerance, type 2 diabetes mellitus, metabolic syndrome and endometrial hyperplasia (Teede et al., 2018; Rotterdam ESHRE/ASRM-Sponsored PCOS Consensus Workshop Group, 2004). The burden of PCOS, however, lies as much in how a woman feels and functions as in her hormonal or ultrasonographic findings (Jones et al., 2008). Infertility, obesity, acne, hirsutism and menstrual disturbances often lead to anxiety, depression, poor body image, low self-esteem and social withdrawal, and systematic reviews and meta-analyses have shown that anxiety and depressive symptoms are common in women with PCOS (Barry et al., 2011; Cooney et al., 2017).

Quality of life has therefore emerged as an important outcome measure. A systematic review of health-related quality of life measurement in PCOS concluded that disease-specific instruments are more sensitive to the problems of these women than generic ones (Jones et al., 2008). The Polycystic Ovary Syndrome Health-Related Quality of Life Questionnaire (PCOSQ), developed by Cronin et al. (1998), is a validated, disease-specific tool that assesses the impact of PCOS on the domains of emotions, body hair, weight, infertility and menstrual problems; each item is scored on a seven-point scale and a higher score indicates a better quality of life.

Conventional management is directed at the presenting complaint of the individual woman. Lifestyle modification is the first-line measure, while combined oral contraceptive pills, anti-androgens, metformin and ovulation induction agents are used for menstrual irregularity, hirsutism, metabolic disturbance and anovulatory infertility respectively (Teede et al., 2018; Ralston et al., 2018). These measures often give symptomatic relief, but they may cause adverse effects, symptoms frequently return when treatment is stopped, and they do not directly address the emotional and psychosocial aspects of the disorder (Teede et al., 2018).

Homoeopathy, being a holistic system of medicine, aims at treating the individual as a whole rather than the disease alone. According to Hahnemann (n.d.), the remedy is selected on the totality of symptoms, and the potency and repetition are decided according to the susceptibility of the patient. In PCOS this approach allows the emotional distress, menstrual disturbance, weight and cosmetic complaints to be addressed together, and constitutional remedies such as *Pulsatilla*, *Sepia*, *Natrum muriaticum*, *Calcarea carbonica* and *Lachesis* have been described in the homoeopathic literature for such patients (Kent, n.d.; Boericke, n.d.). However, documented evidence evaluating changes in quality of life in these women with a standardised, disease-specific tool such as the PCOSQ is limited, and reports describing which medicines and potencies are actually prescribed in routine out-patient practice, together with the patient-reported outcome, are scarce. The present retrospective study was therefore undertaken to assess the change in the quality of life of women with PCOS before and after individualized homoeopathic treatment, using the PCOSQ.

2. AIM AND OBJECTIVES

Aim: To assess the quality of life of women with Polycystic Ovary Syndrome after homoeopathic intervention using the PCOSQ questionnaire.

Primary objective: To assess the role of homoeopathic intervention in improving the quality of life of women with PCOS by comparing PCOSQ scores before and after treatment.

Secondary objectives: To evaluate the baseline quality of life of women diagnosed with PCOS using the PCOSQ; to describe the individualized homoeopathic medicines and potencies prescribed; and to describe the age distribution of the cases.

Hypothesis: The null hypothesis (H0) was that there is no significant difference in the mean PCOSQ score of women with PCOS before and after individualized homoeopathic treatment. The alternative hypothesis (H1) was that there is a significant difference, the score after treatment being higher.

3. MATERIALS AND METHODS

3.1 Study design and setting

A retrospective observational (before and after) study was carried out in the Out-Patient Department (OPD) of Sarada Krishna Homoeopathic Medical College Hospital, Kulasekharam, Kanyakumari District, Tamil Nadu. The study period was 6 months.

3.2 Participants

Thirty women diagnosed with PCOS and attending the OPD were studied. Females aged 12–40 years with a diagnosis of PCOS who were willing to participate and provide informed consent were included. Pregnant and lactating women, women with other endocrine disorders such as thyroid dysfunction or Cushing's syndrome, and patients on long-term hormonal therapy were excluded.

3.3 Intervention

Individualized homoeopathic medicines were prescribed on the basis of detailed case taking and constitutional assessment. The medicine was selected on the totality of symptoms, and the potency and repetition were decided according to the susceptibility of each patient (Hahnemann, n.d.). The medicine and potency prescribed to each patient were recorded from the case records.

3.4 Assessment tool

Quality of life was assessed with the Polycystic Ovary Syndrome Health-Related Quality of Life Questionnaire (PCOSQ) (Cronin et al., 1998), which comprises 26 items in five domains (Table A). Each item is answered on a seven-point scale, and the PCOSQ score of a patient is expressed as the mean of her item responses (range 1–7), a higher score indicating a better quality of life. Scores were recorded before the start of treatment (baseline) and after the homoeopathic intervention. Based on the score after treatment, quality of life was categorised as good when the score was above 5.5 and as relatively good when it was 5.5 or below.

Table A. Domains of the PCOSQ.

Domain	No. of items	Example of item
Emotions	8	Felt abnormal because of your PCOS
Infertility	5	Been scared that you may not have children
Body hair	5	Felt embarrassed by your facial hair
Weight	5	Had trouble dealing with your weight
Menstrual problems	3	Irregular menstrual periods

3.5 Outcome measures and statistical analysis

The primary outcome was the change in the PCOSQ score. Scores before and after treatment were compared using the paired t-test, and the Wilcoxon signed-rank test was applied as a non-parametric check. A p value below 0.05 was considered statistically significant. Age, medicine prescribed and potency were analysed descriptively as frequencies and percentages, and continuous data are expressed as mean $\pm$ SD.

3.6 Ethical considerations

Informed consent was obtained from the participants. Participants were informed of the nature of the research, its risks and benefits, and of their right to abstain or withdraw consent at any time. The medicines were potentized homoeopathic preparations prescribed in the minimum dose, and no costly investigations or treatment expenses were imposed on the participants. The identity and records of the participants have been kept strictly confidential and are not disclosed in this report.

4. RESULTS

A total of 30 women with PCOS were included. The age of the patients ranged from 12 to 39 years (mean 23.9 years). The distribution of cases by age is given in Table 1 and Fig. 1.

Table 1. Distribution of cases according to age. (n = 30)

Age group (years)	Number of patients	Percentage
11–15	2	6.7%
16–20	5	16.7%
21–25	14	46.7%
26–30	4	13.3%
31–35	2	6.7%
36–40	3	10.0%

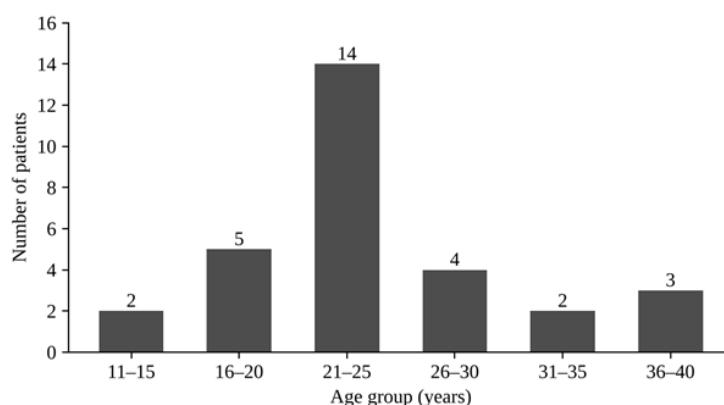


Fig. 1. Distribution of cases according to age.

The 21–25 year group was the largest, with 14 patients (46.7%), nearly three times the next largest group (16–20 years, 5 patients). The 11–15 and 31–35 year groups were the smallest, with 2 patients each (6.7%).

Fifteen different prescriptions were recorded, including *Sac lac* in one patient (Table 2, Fig. 2). *Sulphur* was the most frequently prescribed medicine (7 patients, 23.3%), more than twice as often as any other medicine; *Lycopodium*, *Natrum muriaticum*, *Pulsatilla* and *Sepia* followed with 3 patients each. Nine prescriptions, including *Sac lac*, were given to only one patient each and together accounted for 30.0% of the cases.

Table 2. Distribution of cases according to medicine prescribed. (n = 30)

Medicine prescribed	Number of patients	Percentage
<i>Sulphur</i>	7	23.3%
<i>Lycopodium</i>	3	10.0%
<i>Natrum muriaticum</i>	3	10.0%
<i>Pulsatilla</i>	3	10.0%
<i>Sepia</i>	3	10.0%
<i>Nux vomica</i>	2	6.7%
<i>Agnus castus</i>	1	3.3%
<i>Baryta carbonica</i>	1	3.3%
<i>Carcinosin</i>	1	3.3%
<i>Gelsemium</i>	1	3.3%
<i>Rhus tox</i>	1	3.3%
<i>Sabina</i>	1	3.3%
<i>Sac lac</i> (placebo)	1	3.3%
<i>Staphysagria</i>	1	3.3%
<i>Thuja</i>	1	3.3%

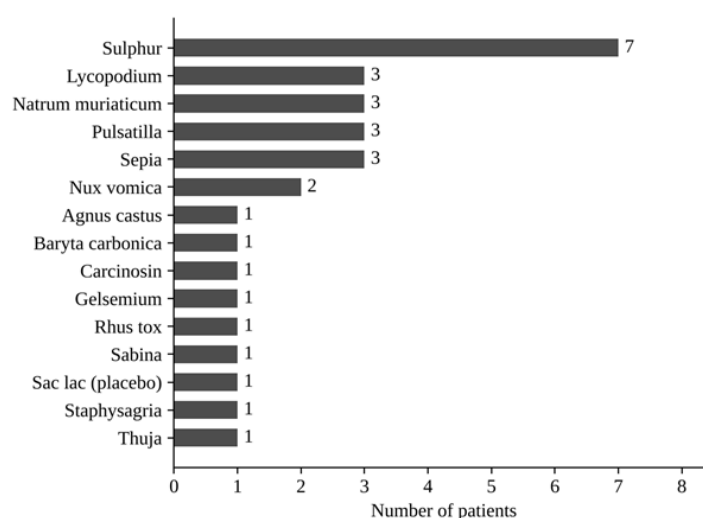


Fig. 2. Distribution of cases according to medicine prescribed.

The 200C potency was the most commonly used (20 patients, 66.7%), four times as common as 1M, the next most used potency (5 patients). The 0/1 (LM) potency was used in one patient, and one patient who received *Sac lac* had no potency (Table 3).

Table 3. Distribution of cases according to potency prescribed. (n = 30)

Potency used	Number of patients	Percentage
30C	3	10.0%
200C	20	66.7%
1M	5	16.7%
0/1	1	3.3%
Nil (<i>Sac lac</i>)	1	3.3%

The PCOSQ score of every one of the 30 patients was higher after treatment than before (Table 4, Fig. 3). The mean score rose from 3.14 ± 0.33 to 5.45 ± 0.39 , an increase of 73.7% over baseline. Even the lowest score after treatment (4.85) was higher than the highest score before treatment (3.69), so the two sets of scores did not overlap. The gain was smallest in patient 20 (1.50 points) and largest in patient 19 (2.85 points).

Table 4. Comparison of PCOSQ scores before and after treatment. (n = 30)

Parameter	Before treatment	After treatment
Mean PCOSQ score $\pm$ SD	3.14 ± 0.33	5.45 ± 0.39
Minimum score	2.58	4.85
Maximum score	3.69	6.15

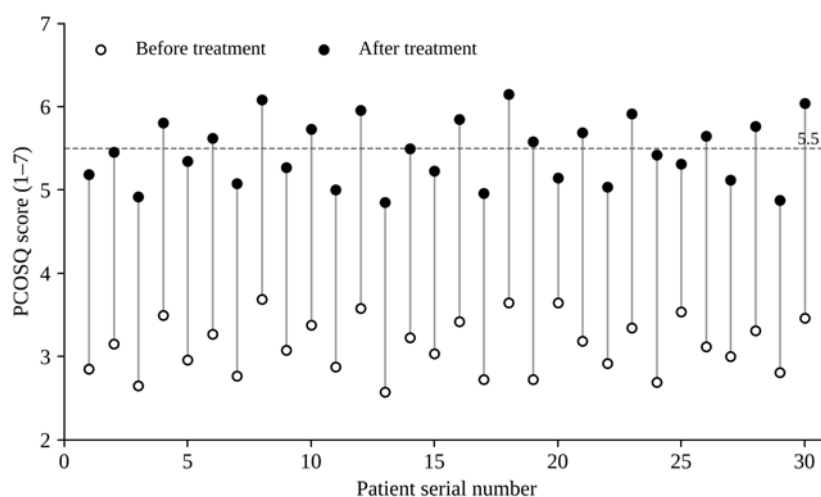


Fig. 3. PCOSQ scores before and after treatment in each patient (dashed line: cut-off of 5.5 for good quality of life).

The improvement was statistically highly significant by both tests (Table 5). The mean gain was 2.31 points, with a narrow 95% confidence interval of 2.22 to 2.41, and all 30 patients improved. The null hypothesis is therefore rejected; however, as there was no control group, this does not by itself show that the medicines caused the improvement.

Table 5. Paired comparison of PCOSQ scores. (n = 30)

Measure	Value
Mean difference (after – before) $\pm$ SD	2.31 $\pm$ 0.26
95% confidence interval of the difference	2.22 to 2.41
Paired t-test (df = 29)	t = 48.98, p < 0.001
Wilcoxon signed-rank test	p < 0.001
Patients showing improvement	30 of 30 (100%)

After treatment, 13 patients (43.3%) had a good quality of life (score above 5.5) and 17 (56.7%) a relatively good quality of life (score 5.5 or below) (Table 6). Thus, although every patient improved, more than half still had scores at or below 5.5 after treatment.

Table 6. Distribution of cases according to quality of life after treatment. (n = 30)

Quality of life	Number of patients	Percentage
Good (score above 5.5)	13	43.3%
Relatively good (score 5.5 or below)	17	56.7%

Mean scores according to medicine and potency are given in Tables 7 and 8. Among the six medicines used in two or more patients, the mean gain was largest with *Sepia* (2.50) and smallest with *Sulphur* (2.17), a difference of only 0.33 points. Among single-patient prescriptions, the mean gain ranged from 2.07 (*Thuja*) to 2.73 (*Gelsemium*). The patient given *Sac lac* gained 2.31 points, the same as the overall mean gain. By potency, the mean gain was highest in the 30C group (2.61, n = 3) and lowest in the 0/1 group (2.12, n = 1); the largest group, 200C (n = 20), gained 2.30 points, close to the overall mean. The groups are too small to be compared with one another reliably.

Table 7. Mean PCOSQ scores according to medicine prescribed.

Medicine	n	Mean before	Mean after	Mean gain
<i>Sulphur</i>	7	3.20	5.37	2.17
<i>Lycopodium</i>	3	2.99	5.35	2.36
<i>Natrum muriaticum</i>	3	3.41	5.64	2.23
<i>Pulsatilla</i>	3	3.05	5.43	2.38
<i>Sepia</i>	3	3.17	5.67	2.50
<i>Nux vomica</i>	2	3.10	5.41	2.31
<i>Agnus castus</i>	1	3.46	6.04	2.58
<i>Baryta carbonica</i>	1	3.31	5.77	2.46
<i>Carcinosin</i>	1	3.04	5.23	2.19
<i>Gelsemium</i>	1	2.69	5.42	2.73
<i>Rhus tox</i>	1	3.08	5.27	2.19
<i>Sabina</i>	1	3.23	5.50	2.27
<i>Sac lac</i> (placebo)	1	2.77	5.08	2.31
<i>Staphysagria</i>	1	3.38	5.73	2.35
<i>Thuja</i>	1	2.81	4.88	2.07

Table 8. Mean PCOSQ scores according to potency prescribed.

Potency	n	Mean before	Mean after	Mean gain
30C	3	3.09	5.70	2.61
200C	20	3.18	5.49	2.30
1M	5	3.09	5.31	2.22
0/1	1	3.00	5.12	2.12
Nil (<i>Sac lac</i>)	1	2.77	5.08	2.31

5. DISCUSSION

PCOS affects the quality of life of women through its menstrual, reproductive, cosmetic and emotional consequences (Jones et al., 2008). This study assessed the quality of life of 30 women with PCOS, using the disease-specific PCOSQ, before and after individualized homoeopathic treatment in a hospital OPD. The mean baseline score of 3.14 on a seven-point scale indicates a considerably impaired quality of life at presentation, in keeping with the emotional and psychosocial burden described in this population (Barry et al., 2011; Cooney et al., 2017).

Age. The patients were aged 12 to 39 years, and the largest group, 14 patients (46.7%), was aged 21–25 years. This agrees with the understanding that PCOS is a disorder of the reproductive years, with symptoms appearing after puberty and bringing young women to medical attention for menstrual irregularity and cosmetic concerns (Azziz et al., 2016). Six patients (20.0%) were below 18 years of age.

Medicines and potencies. Fourteen different medicines were prescribed, in addition to *Sac lac* in one patient, which reflects the individualization that is central to homoeopathic practice: the remedy is chosen on the totality of the patient and not on the diagnosis (Hahnemann, n.d.). *Sulphur* was prescribed most often (23.3%), and *Pulsatilla*, *Sepia*, *Natrum muriaticum* and *Lycopodium*, each prescribed in three cases, are constitutional remedies recognised in the materia medica for women's complaints (Kent, n.d.; Boericke, n.d.). The wide range of medicines means that no inference can be drawn about the efficacy of any one remedy in PCOS. The 200C potency was used in two-thirds of the cases; the choice of potency depends on the susceptibility of the individual (Hahnemann, n.d.), and the group sizes for the other potencies were too small to compare their effect.

PCOSQ scores. The mean PCOSQ score improved from 3.14 ± 0.33 to 5.45 ± 0.39 , a mean gain of 2.31 points (73.7% over baseline), which was statistically highly significant ($p < 0.001$) by both the paired t-test and the Wilcoxon signed-rank test. Every one of the 30 patients showed an increase in score, and the post-treatment range did not overlap the baseline range. After treatment, 13 patients (43.3%) were in the good category and 17 (56.7%) in the relatively good category. This suggests that the patients felt better in the areas that the questionnaire covers, namely emotions, infertility, body hair, weight and menstrual problems.

Interpretation with caution. The study had no control group. One patient who was given *Sac lac* also showed a rise in score (2.77 to 5.08) of a size similar to that seen with the

medicines. This indicates that non-specific factors, such as the attention and counselling received at each visit, general advice on diet and lifestyle, the natural course of the illness and the expectation of benefit, may have contributed to the improvement. The results therefore show that the quality of life of these women improved during homoeopathic care, but they do not prove that the improvement was caused by the medicines. A controlled study is needed to answer that question.

6. STRENGTHS AND LIMITATIONS

Strengths

- Use of a validated, disease-specific, patient-reported outcome measure (PCOSQ).
- Paired before-and-after scores were available for all 30 patients, with no missing data.
- Real-world OPD setting, with the medicines and potencies prescribed reported in full, including the one patient who received *Sac lac*.

Limitations

- The sample was small (30 patients) and from a single centre, so generalisation should be cautious.
- There was no control group, so the improvement cannot be attributed with certainty to the homoeopathic medicines.
- Only the overall PCOSQ score was available; domain-wise scores could not be compared.
- Objective parameters such as hormonal levels, ovarian morphology on ultrasound and body weight were not compared before and after treatment.
- A wide range of medicines and potencies was used, which makes remedy-wise and potency-wise comparison unreliable.
- The study period was 6 months, so long-term effect and recurrence could not be assessed.
- The PCOSQ is self-reported and subject to the patient's own perception and reporting.
- Six of the 30 patients were below 18 years of age, and the PCOSQ was not separately validated for adolescents in this study.

7. FUTURE SCOPE

- Prospective, controlled (preferably randomised) studies with a placebo or standard-care comparison group.
- Domain-wise analysis of the PCOSQ (emotions, infertility, body hair, weight and menstrual problems).

- Inclusion of objective outcomes such as hormonal profile, ultrasonographic findings and body weight or BMI alongside quality of life.
- Larger, multi-centre samples with longer follow-up to assess durability of benefit and recurrence.
- Separate analysis of adolescents and adults.

8. CONCLUSION

In this retrospective observational study, the quality of life of women with PCOS, measured by the PCOSQ, improved significantly during individualized homoeopathic treatment: the mean score rose from 3.14 to 5.45 ($p < 0.001$), all 30 patients improved, and 13 of 30 (43.3%) reached the good quality of life category. The condition was most common in the 21–25 year age group, *Sulphur* was the most frequently prescribed medicine, and 200C was the predominant potency. Because there was no control group and a patient given *Sac lac* also improved, the results do not establish that the medicines were responsible. They do, however, provide baseline patient-reported data and justify larger, controlled studies with domain-wise analysis.

REFERENCES

1. Azziz R, Carmina E, Chen Z, Dunaif A, Laven JSE, Legro RS, et al. Polycystic ovary syndrome. Nat Rev Dis Primers. 2016;2:16057.
2. Teede HJ, Misso ML, Costello MF, Dokras A, Laven J, Moran L, et al. Recommendations from the international evidence-based guideline for the assessment and management of polycystic ovary syndrome. Hum Reprod. 2018;33(9):1602–18.
3. Rotterdam ESHRE/ASRM-Sponsored PCOS Consensus Workshop Group. Revised 2003 consensus on diagnostic criteria and long-term health risks related to polycystic ovary syndrome (PCOS). Hum Reprod. 2004;19(1):41–7.
4. Stein IF, Leventhal ML. Amenorrhea associated with bilateral polycystic ovaries. Am J Obstet Gynecol. 1935;29(2):181–91.
5. World Health Organization. Polycystic ovary syndrome [Internet]. Geneva: World Health Organization; [cited 2026 Oct 2]. Available from: <https://www.who.int>
6. Jones GL, Hall JM, Balen AH, Ledger WL. Health-related quality of life measurement in women with polycystic ovary syndrome: a systematic review. Hum Reprod Update. 2008;14(1):15–25.

7. Barry JA, Kuczmierczyk AR, Hardiman PJ. Anxiety and depression in polycystic ovary syndrome: a systematic review and meta-analysis. *Hum Reprod.* 2011;26(9):2442–51.
8. Cooney LG, Lee I, Sammel MD, Dokras A. High prevalence of moderate and severe depressive and anxiety symptoms in polycystic ovary syndrome: a systematic review and meta-analysis. *Hum Reprod.* 2017;32(5):1075–91.
9. Cronin L, Guyatt G, Griffith L, Wong E, Azziz R, Futterweit W, et al. Development of a health-related quality-of-life questionnaire (PCOSQ) for women with polycystic ovary syndrome (PCOS). *J Clin Endocrinol Metab.* 1998;83(6):1976–87.
10. Ralston SH, Penman ID, Strachan MWJ, Hobson RP, editors. *Davidson's Principles and Practice of Medicine.* 23rd ed. Edinburgh: Elsevier; 2018.
11. Hahnemann S. *Organon of Medicine.* 6th ed. Boericke W, translator. New Delhi: B. Jain Publishers.
12. Kent JT. *Lectures on Homoeopathic Philosophy.* New Delhi: B. Jain Publishers.
13. Boericke W. *Pocket Manual of Homoeopathic Materia Medica with Repertory.* New Delhi: B. Jain Publishers.