Using OPD-Based Counselling Room Approach to Inculcate a Feel Good Factor among Girls Tormented by Polycystic Ovary Syndrome (PCOS) Symptoms

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Abstract

Background: Polycystic ovarian syndrome (PCOS) prevalence is steeply rising. The reported prevalence among adolescents ranges from 9.13% to 36%. PCOS affects various body organs. The features of PCOS include oligomenorrhea/amenorrhea, hirsutism, alopecia, anovulation and polycystic ovaries. If not treated, it can increase the risk of infertility, diabetes, metabolic syndrome and cardiovascular disease. Obesity and overweight worsen the symptoms of PCOS women. Among PCOS women, obesity and overweight is reported to be 50%–70%.

Research shows that physical health consequences of PCOS may result in psychological distress among women affected by the condition. It seriously compromises health-related quality of life of girls. The anxiety in life of PCOS women is mostly attributed to irregular menses, hirsutism and infertility. The influence of PCOS on quality of life is an issue that needs to be taken seriously. The psychological implications of this condition are underestimated and largely ignored.

Keywords: PCOS, Counselling, Patient centric approach, Health related quality of life, Women’s health, Adolescent health

The etiology behind the disease is still not clear though genetic and environmental factors are considered to be associated with PCOS.

PCOS can be managed but not cured. Management of PCOS includes pharmacological and non-pharmacological treatment. The usual medicines prescribed for PCOS focus on blood glucose and hormonal regulation. Unfortunately, these are not fully able to deal with all the metabolic parameters. Rather, these may have their own negative effects. As per PCOS treatment guidelines, the first line of treatment for its management includes lifestyle modification. However,
the emphasis these days is on pharmacological treatment. A more holistic approach is required in treating PCOS, which affect a woman’s body, mind and her identity as a woman.

Lifestyle modification can be a key intervention to improve quality of life of PCOS cases. Diet modification, increased physical activity, and stress management can do wonders. Lifestyle intervention has led to reduction in weight and improvement in symptoms of PCOS. Lifestyle interventions are cost-effective strategies compared to pharmacological options.

Despite such evidence, majority of the PCOS girls do not avail the benefits of following a healthy lifestyle. The possible reason could be lack of effective communication regarding the importance of a healthy lifestyle. The medical fraternity in OPDs does not have ample time to counsel the affected women due to overcrowded OPDs. BMJ reported in 2018 that doctors in India see patients for barely 2 minutes. Such a short consultation adversely affects patient care, workload and stress of doctors. In the western countries, consultation crosses 20 minutes.

There is a need to empower PCOS women for self-management through lifestyle modification. This can only be achieved by offering laidback counselling sessions to affected women. There is need to focus upon active collaboration and shared decision making between patients, families, and providers. This idea has been successfully implemented by the authors by establishing a separate multipurpose behavior therapy/counselling room in the gynecology OPD of PGIMER, Chandigarh.

Based on the concept of health promotion and de-medicalization, a multi-purpose behavior therapy (MPBT) room was established in the Gynecology OPD of a tertiary care hospital and research institute of north India in November 2012. So far, >8000 patients have been counselled successfully. The results have proved that many of the problems of women reporting at Gyne. OPD can be resolved by non-medicinal interventions, e.g., appropriate behavior therapy, exercises and counselling. Here, patients referred by the specialists are counselled regarding self-care/behavior therapy (weight reduction and nutritional advice). Husbands and mothers/mothers-in-law are also counselled along with the patients. Behavior therapy was effective in relieving reproductive health symptoms of women. It is feasible to introduce health promotion orientation in OBG OPD for enhancing patient satisfaction. The latest addition to this approach is the use of mobile phone/laptop for video-based counselling in MPBT room.

A similar approach was applied to resolve the problem of women with PCOS by non-medicinal interventions. An intervention package was designed for PCOS patients attending MPBT room. This package seeks to improve management of women having PCOS.

Thus, the aim of this investigation was to see the efficacy of OPD-based lifestyle counselling on health-related quality of life of PCOS cases.

**Methodology**

The cases for the study were recruited from the gynecology OPD, PGIMER, Chandigarh. 104 cases were recruited for the intervention, after physician approval. All were diagnosed PCOS cases (as per the Rotterdam criteria), age 18–40 years and were willing to provide informed consent and visit hospital for follow up. Women currently on oral contraceptives or other medications, pregnant, lactating women and those with any pre-existing condition (DM, thyroid, CAD, abnormal creatinine levels, liver dysfunction, or hyper-prolactemia) were excluded.

Clearance for the study was obtained from the ethics committee of PGIMER. Written informed consent was obtained from participants of the study. The intervention was for six months and follow-up visits were planned every month.

The following parameters were studied before and after the intervention:

- Anthropometric factors – Weight and waist circumference
- Health-related quality-of-life scores

**Tools**

- Weight was measured (in kg) using a digital weighing scale for pre- and post-readings. Waist circumference was taken at midway between the lowest rib margin and iliac crest.
- The Polycystic Ovary Syndrome Health-Related Quality of Life Questionnaire (PCOSQ) was used to get a self-assessment of the quality of life. It is an instrument that was specifically designed and validated to evaluate HRQL in PCOS. The instrument consists of 26 questions in five domains that had the highest impact to women with PCOS: body hair, emotions, infertility, weight and menstrual problems. Each item is associated with a seven-point Likert scale, in which a score of 7 suggest no problems or difficulties and 1 indicates maximum HRQOL impairment on that item. Lower scores on the PCOSQ indicate higher functioning

**Intervention**

The study intervention included MPBT room counselling sessions for patients with their family members. It included:

- Conventional healthy diet
- Exercising schedule
- Yoga and Meditation – Deep breathing exercise thrice a week
• Sleep at least 6–8 hours
• Maintaining an adherence diary
• Easy to understand IEC materials like poster, pamphlet, book
• Patients were followed up on mobile phone to ensure compliance
• WhatsApp groups were used successfully

Analysis

The mean scores of the five subscales of the PCOSQ in order of impact from least concern (optimal functioning) to greatest reported concern (poorest functioning), along with a total PCOSQ score calculated from the five subscales was calculated. The lower the score, the greater the negative impact on health-related QOL. SPSS was used for analysis.

Result

Out of the total 104 recruited, 13 dropped out from 6 month-long intervention program. The average age of 91 subjects was 24.5±3.7 yrs. The mean weight was 67.8±14.4 and mean waist circumference was 95.0±12.6. After intervention, the weight and waist circumference significantly reduced to 64.4±13.3 and 90.9±13.3, respectively.

Polycystic Ovary Syndrome Health-Related Quality of Life Questionnaire (PCOSQ) was used to get a self-assessment of the quality of life. The instrument has five domains that had the highest impact to women with PCOS: body hair, emotions, infertility, weight and menstrual problems. The lower the score, the greater the negative impact on health-related QOL.

The lowest mean score was for the domain menstrual problems followed by weight and hirsutism.

There was significant negative correlation between the QOL score (weight domain) and body weight. The higher the weight, the lower the reported QOL score for weight domain, which was indicative of poorer functioning. Higher BMI was associated with lower perceived quality of life in weight subscale.

| Variables (Domains)       | Mean±S.D (Before) | Mean±S.D (After) | Sig. (2-tailed) |
|---------------------------|-------------------|------------------|-----------------|
| Hirsutism QOL score       | 3.59±2.07         | 4.08±1.88        | .001            |
| Menstrual problems QOL score | 3.28±1.26         | 4.2±1.44         | .001            |
| Emotion QOL score         | 4.01±1.43         | 4.83±1.51        | .001            |
| Infertility QOL score     | 4.17±1.78         | 5.17±1.67        | .001            |
| Weight QOL score          | 3.4±1.69          | 4.33±1.84        | .001            |

Paired t-test was applied to see whether the difference in before and after intervention QOL scores was significant or not. In all five domains, the difference was significant, i.e., hirsutism, menstrual problems, infertility, weight, and infertility.

Conclusion

A team-based approach and lifestyle counselling was found to be successful in improving the overall wellness of the patients of PCOS. Thus, there is a need to increase the use of counselling-based approach in OBG OPDs for management of PCOS through healthy lifestyle modification.

Conflict of Interest: None

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