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Protocol on Effects of Yoga on Anxiety and Depression among Women with Polycystic Ovarian Disease

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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Study Protocol

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ABSTRACT

Background of the Study: The most common endocrine condition among women of reproductive age is polycystic ovarian syndrome (PCOS). Amenorrhea, hirsutism, infertility, obesity, acne vulgaris, and androgenic alopecia are some of the symptoms. PCOS is a stigmatising condition that has a negative impact on a woman's identity, mental health, and overall quality of life (QOL). In India, this issue has gotten too little attention. PCOS is a hormonal imbalance that affects one out of every ten women of childbearing age. PCOS causes hormonal imbalances and metabolism issues in women, which can have an impact on their overall health and attractiveness. Infertility can also be caused by PCOS, which is a common and treatable condition.

Objectives: 1. To assess the existing level of anxiety and depression among polycystic ovarian disease women. 2. To assess the testosterone level in polycystic ovarian disease women. 3. To assess the effectiveness of yoga on level of anxiety and depression among polycystic ovarian

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Warghane and Mahakarkar; JPRI, 33(45A): 432-436, 2021; Article no.JPRI.73634

disease women. 4. To associate the level of anxiety with selected demographic variables. 4. To associate the level of depression with selected demographic variables.

Material and Methods: A Experimental one group pre-test and post-test study design was undertaken to assess effectiveness of yoga (Malasana) related to level of anxiety and depression among polycystic ovarian disease women. In this study a total number of 30 women who fulfill the inclusion criteria were selected. Modified anxiety rating scale and modified depression scale was developed to assess effectiveness of yoga (Malasana) related to level of anxiety and depression among polycystic ovarian disease women.

Expected Results: This study is planned to assess the effectiveness of yoga (Malasana) on level of anxiety and depression among polycystic ovarian disease. Hence it is expected to evaluate the effectiveness of yoga (Malasana) on level of anxiety and depression which helps to understand the effectiveness of malasana on anxiety and depression among polycystic ovarian disease women. **Conclusion:** The conclusion will be drawn from the results.

Keywords: Anxiety; depression; PCOD women's.

1. INTRODUCTION

The first-line effective treatment for PCOS is lifestyle changes. Small lifestyle adjustments have been shown to enhance symptom severity and psychological well-being [1]. The impact of exercise on psychological outcomes in PCOS has been studied in two trials. According to a study, women with PCOD have a significant prevalence of anxiety. Anxiety appears to be a risk factor for the development of depression, according to research [2]. Yoga has been shown to be effective in the treatment of a variety of ailments in various medical and scientific research. The purpose of this study was to see how yoga affected anxiety and depression in PCOD women [3].

Yoga can improve symptoms of depression, anxiety, stress, post-traumatic stress disorder, and other psychological problems as well as promote well-being [4]. Yoga exercises was improved the variables of self-description, psychological status, and the quality of life [5].

Yoga reduces stress and anxiety, controls aggravating effects of stress on cardiovascular health, mental health, chronic pain, and sleep disorders in human being [5].

Instance, some poses are uplifting and energizing, while others are soothing and stabilizing. Malasana has a grounding quality—it taps into a downward-flowing energy known in yoga as apana vayu—and is a good pose to practice whenever you need to bring on calm [6].

2. BACKGROUND OF THE STUDY

According to a study, women with PCOD have a significant prevalence of anxiety. Anxiety

appears to be a risk factor for the development of depression, according to research. Yoga has been shown to be effective in the treatment of a variety of ailments in various medical and scientific researches. The purpose of this study was to see how yoga affected anxiety and depression in PCOD women [7].

PCOS (polycystic ovarian syndrome) is an endocrinopathy that primarily affects women of reproductive age. Due to physiological changes, concerns about physical appearance, and societal pressure from infertility, these women are at risk of developing depression and anxiety. As a result, the link between PCOS, anxiety, and depression may have an effect on patients' quality of life. The goal of this study is to determine the prevalence of depression and anxiety symptoms in PCOS patients, as well as their relationship to other socioeconomic factors [8].

3. NEED OF THE STUDY

Yoga can assist women with PCOD reduce testosterone levels while also reducing anxiety and depression symptoms. Participants who attended a one-hour yoga class three times each week. Women who completed the yoga intervention had lower free testosterone levels, according to the researchers Free testosterone is a natural hormone that, in women with PCOD, can be raised above typical female levels [2].

According to a recent study, practising yoga can assist women with PCOS lower testosterone levels and reduce anxiety and depression symptoms. Participants who completed a onehour yoga class three times a week for three months saw a 29 percent reduction in testosterone levels [7].

4. METHODOLOGY

The study was based on interventional evaluatory approach with experimental one group pre-test and post-test design. A nonprobability purposive sampling technique and 30 samples of among polycystic ovarian disease women in selected hospital are used for this study. Tools are used for the study to ssess the anxiety that is modified BECKS INVENTARY scale and for depression Modified zung self rating depression scale.

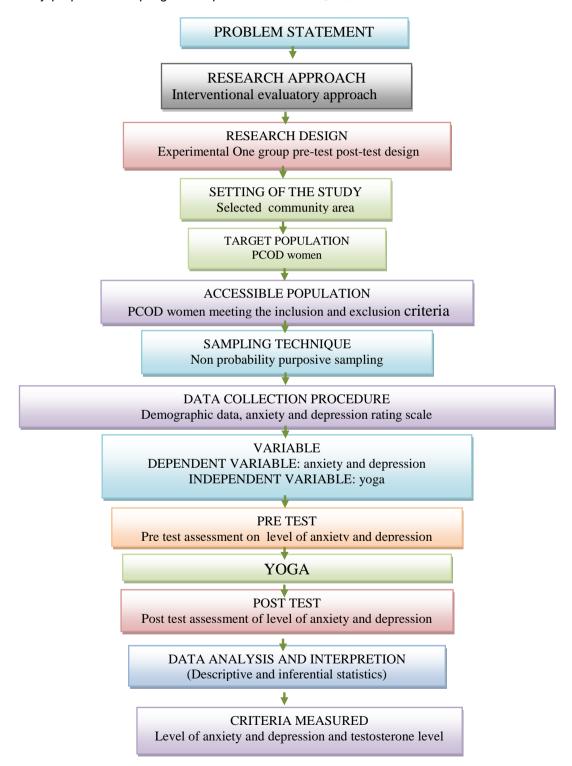


Fig. 1. Schematic presentation of the research methodology

4.1 Statistical Analysis

Statistical analysis done by descriptive and infeential statistics with the help of SPSS 24.0 software.

4.2 Inclusion Criteria

The women with PCOD between the age 18-40.

- Those who can understand Marathi and English.
- Those who are willing to participate in study.
- Those who are available at the time of study.

4.3 Exclusion Criteria

- The women with other diagnosis
- Those who are not able to communicate in English and Marathi.

4.4 Intervention

Assess the effectiveness of yoga (Malasana) on level of anxiety and depression among polycystic ovarian disease women under the guidance of the subject experts in obstritics and gynecology of nursing. On the first day of interaction investigator maintain interpersonal relationship gain confidence with sample and about intervention and 2ml blood sample of will be collected to know the level of testosterone as pre test and assess the anxiety and depression then on day of second videos related to the yoga malasana will be shown to 30 min and start to perform for 10 Minuit. It will be perform for 15 days and on day of 16 post test for testosterone level blood sample will be collected and assess the anxiety and depression to know the effectiveness of yoga.

5. EXPECTED OUTCOME/ RESULTS

This study is planned to assess the effectiveness of yoga (Malasana) on level of anxiety and depression among polycystic ovarian disease. Hence it is expected to evaluate the effectiveness of yoga (Malasana) on level of anxiety and depression which helps to understand the effectiveness of malasana on anxiety and depression among polycystic ovarian disease women.

6. DISCUSSION

Yoga has been shown to be effective in lowering stress arousal and anxiety levels through modifvina sympathetic nerve activity. Furthermore, mental stillness promotes higher awareness through altering an individual's cognitive assessment and perceived self-efficacy in the face of stressors, reducing anxiety symptoms. The yoga practitioner's heightened awareness of how thoughts and emotions originate in reaction to various environmental situations is supposed to cause the cognitivebehavioral effects, helping them to gain more clear perception, less negative emotions, and improved vitality and coping [3].

Yoga not only reduces trait anxiety in teenagers with PCOS, but it may also help to prevent longterm complications including CVD and diabetes [2].

More than a third of women with PCOS (40%) experienced anxiety symptoms, with 18% reporting moderate symptoms and 6% reporting severe. Theoretically, this is due to the nature of their concern being secondary to rather than intrinsic to their ailment. Tension was the most prevalent sign of anxiety, while physical pain was the least common. Physical signs of PCOS, such as acne, obesity, and hirsutism, can contribute to a negative self-image and low self-esteem, which could explain the high prevalence of anxiety in PCOS women. They may also have fears and concerns about the future and their capacity to conceive [8,9,10,11,12].

7. CONCLUSION

Conclusion will be drawn from the statistical analysis.

ETHICAL APPROVAL

Study was approved by the Institutional Ethics Committee (letter no –DMIMS (DU)/IEC/2021/286) and the study will be conducted in accordance with the ethical guidelines prescribed by institutional Ethics Committee on Human Research.

CONSENT

As per international standard or university standard, patient's written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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