Awareness Of Lifestyle Modification In Female Diagnosed With Polycystic Ovarian Disease

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**ABSTRACT**

Most of the women in the reproductive age group are affected by PCOD. Emphasis on prevention of PCOD, as the incidents of PCOD, are increasing. The current incident of PCOD is (5% to 15%) is increasing fastly due to lifestyle and stress. It is also becoming a common problem amongst adolescent, developing soon after puberty. Amongst infertile women, about 15% to 20% of infertility cases are due to anovulation caused by PCOD. This study was done to assess the knowledge of PCOD among women and to make them aware of lifestyle modification is an important part of treatment. Some of the women who developed cardiovascular disease, hypertension, endometrial cancer and type 2 diabetes later in life appear to have suffered from PCOD in earlier years.

A cross-sectional observational study was conducted in Chennai with 100 women of reproductive age (18~45 yrs) from January to June 2020 using standardized questionnaire. According to the study, 28% of the subjects are very well aware of the PCOD. 58% had expressed somewhat aware, 64% aware that Exercise help in the management of PCOD, in that 27% are maintaining diet and exercise every day. 14% of the respondents are not aware of the PCOD. This study indicated that more awareness should be made in the general public about PCOD as the majority of the participants are ignorant about lifestyle modification.

**INTRODUCTION**

Polycystic Ovarian Disease is a heterogeneous, multisystem endocrinopathy in women of reproductive age with the ovarian expression of varies metabolic disturbance broad spectrum of clinical features such as obesity, menstrual abnormalities and hyperandrogenism.

The exact aetiology of PCOD reminds unknown some of the well-known factors which may influence the onset of PCOD are lifestyle changes, sedentary life, diet and stress.

Some of the women who developed cardiovascular disease, hypertension, endometrial cancer and type 2 diabetes later in life appear to have suffered from PCOD in earlier years.

Lifestyle modification has been proposed to improve not only metabolic and reproductive manifestation of PCOD but also yielding benefits, including improvements in mood, self-esteem, anxiety, depression and psychological well-being (Norman et al., 2003). Lifestyle modification is the preferred first-line treatment for PCOD.

These non-pharmacological measures such as diet
and exercise are recommended as first-line of treatment in oligomenorrhea, hirsutism, infertility, and obesity in PCOD by a majority of endocrinologists and gynaecologists (Cussons et al., 2005).

Lifestyle modification, focus on dietary modification and increased physical activity and behavioural therapy, considered an essential aspect in the management of PCOS (Norman et al., 2002).

The current incident of PCOD (5% to 15%) is increasing fast lately due to lifestyle and stress. It is also becoming a common problem amongst adolescent, developing soon after puberty. Amongst infertile women, about 15% to 20% of infertility cases are due to anovulation caused by PCOD.

Table 1: Question on General Concern of PCOD

| Symptoms of PCOD                        | Percentage of Affected |
|----------------------------------------|------------------------|
| Weight Gain                            | 78%                    |
| Acne                                   | 93%                    |
| Difficulty in getting Pregnancy        | 64%                    |
| Irregular Periods                      | 72%                    |
| abnormal Hair growth                   | 83%                    |

Table 2: Exercise opted by the Participant

| Type of Exercise | Opted by Participant |
|------------------|----------------------|
| Walking          | 42%                  |
| Jogging          | 25%                  |
| Yoga             | 22%                  |
| Others           | 11%                  |

Methods

A cross-sectional observational study was contacted in Chennai with 100 women of reproductive age (18–45 yrs) from January to June 2020 using a standardized questionnaire. The institutional review board and ethics committee of Saveetha medical college approved this study. All women who gave consent to participate in the study were included.

After IEC approval, the general public’s were invited to take part in our study. Informed consent was obtained. The procedure consists of answering a set
of questions asked by the investigator in English or their native language.

The question consists of sociodemographic details of women which include age, Marital status, Height and weight, awareness of Excises, concern with PCOD and willingness in lifestyle modification. All study participants below 18 and above 45 years of age were excluded from the study. There is no funding support for this study.

The analysis was done using SPSS softer version19

RESULTS AND DISCUSSION

One hundred women participated in the study. The mean age of participants in the study was 25.34. 58% belong to the age group of 18 – 25 years, 34% belong to the age group of 25 – 35 years, and 8% belong to the age group of 35 – 45 (Figure 1). Majority of women were unmarried (64%).

In the level of awareness, 28% of the subjects are very well aware of the PCOD. 58% had expressed somewhat aware of PCOD, 64% aware that Exercise help in the management of PCOD, in that 27% are maintaining diet and exercise every day. 14% of the respondents are not aware of the PCOD (Figure 2). The primary source of information is the doctor (78%), internet (22%). 97% are willing to change their lifestyle modification.

On observation of Table 1 it is seeing that acne (93%) abnormal Hair growth (83%) and Weight gain appears to be the most commonly experienced symptoms by these women (Figure 3).

From the Table 2 it is clear that most opted exercise by the patients was walking (42%), followed by jogging (25%), then yoga (22%) and other exercises like going to the gym and weight lifting. Etc (Figure 4).

This study shows that 28% of the subject are very well aware of PCOD whereas 14% are not aware of PCOD as they are uneducated which is similar to a study by DR PothisrajPitcai et al., reported that a study done with 100 subjects, 21% are aware of PCOD, and 6% are not aware of PCOD (Pitchai et al., 2016).

Most of the Participant (64%) are aware that exercise and diet modification help treat PCOD, in that only 27% are doing exercise daily. Still, others refuse to do, due to lack of interest. Arun Maiya et al. reported that the graded aerobic exercise helps in reducing the cyst size, increasing the ovulation, pregnancy rate as compared to the control group.

A study by Nidhi R et al. in observed holistic yoga program in PCOS helps in reducing anxiety symptoms (Ram et al., 2012).

It is also observed that more than 60% have symptoms of PCOD such as weight gain, acne, difficulty in getting pregnant, irregular periods, abnormal hair growth.

Incidence of PCOD is increasing in India because of better-diagnosing capability by the Indian medical fertility and more awareness among the public.

Still, this is not enough number of people who have gained awareness about PCOD in the past as increased by a slight margin and it has to be increased much more so that we can try to limit the effect of the disease in the future.

CONCLUSIONS

This study indicated that more awareness should be made in the general public about PCOD as the majority of the participants are ignorant about lifestyle modification and not aware of PCOD. Because weight loss and lifestyle changes are one of the primary treatment of polycystic ovarian disease and patients has to be made aware of it. In this study, all the study population are made aware of lifestyle changes, and most subjects are willing to change.

Conflict of Interest

The authors declare that they have no conflict of interest for this study.

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