

KNOWLEDGE AND AWARENESS OF POLYCYSTIC OVARIAN SYNDROME AMONG THE WOMEN ATTENDING OUT PATIENT DEPARTMENT IN TERTIARY CARE CENTER

Obstetrics & Gynaecology

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ABSTRACT

Background: Polycystic ovary syndrome (PCOS) is a chronic multisystem syndrome of ovarian and endocrine dysfunction. Polycystic ovary syndrome inspite of being one of the most common endocrine syndromes still remains to be an underdiagnosed condition. Objective of this study was to assess the PCOS Knowledge and Awareness among the women attending gynae OPD. **Methods:** A cross sectional Prospective study from January 2022 to March 2022 was conducted on 200 women of age group 18-40 years attending Out Patient Departments of Hind Medical College Sitapur through a self made questionnaire. The data collected was analysed and represented in graphical form. **Results:** Among 200 participants, only 32% of the women were aware of the term PCOS. Among the 200 patients 44% of the patients were aware of the multi organ systems involved. Women who knew the term PCOS were mostly from the doctors/health workers accounting for 66%, 20% from Media/Internet sources, 12% from Family and friends and 2% from other sources. Irregular menses was most common presentation of PCOS in 48% Participants, infertility 22%, obesity 20%, facial hair and acne 2%, and others 8%. 64% of the women attending the clinics thought that ultrasonography was the primary investigation for the diagnosis of PCOS followed by clinical evaluation 22%, hormonal assay 2% and other 12%. Modalities likely to be effective for weight reduction were both exercise and diet modification in 70%, exercise 12%; dietary modification 6% and others 12%. the duration of treatment required for managing the disease, more than 6 months treatment was obtained by 46% patients, 3-6 months by 13%, less than 3 months by 19% lifetime by 22% patients. 92% participants were unaware of the long-term complication of PCOS. **Conclusion** Present study show that small number of women are aware of polycystic ovarian syndrome. This leads PCOS to be an underdiagnosed disease and less seekage of medical attention for the disease by women. PCOS being one of the most common disease among young women, methodologies to increase disease awareness should be implemented to lower the morbidities related to the disease and its associated long term complications.

KEYWORDS

INTRODUCTION

Polycystic ovarian syndrome (PCOS) is a heterogeneous clinical entity leading to development of metabolic, endocrine and reproductive disorder. This multifaceted clinical manifestation comprises of hyperandrogenism, menstrual dysfunction, infertility, pregnancy complications and an increased prevalence of obesity and abdominal obesity [1]. PCOS syndrome is associated with insulin resistance and is diagnosed on clinical, biochemical, and ultrasonographic grounds [2] By definition of PCOS, the Rotterdam criteria is the most widely accepted and guidelines the definition. It includes National Institutes of Health definition, which generally describes women with a more severe form of PCOS and mandates the presence of two of the following three findings—hyperandrogenism, ovulatory dysfunction, and polycystic ovaries—plus the exclusion of other diagnoses that could result in hyperandrogenism or ovulatory dysfunction.[3]

Women with PCOS may present with a variety of symptom which vary with age. Reproductive symptoms predominate in younger women. Metabolic features prevalence increases with age but can also occur in obese young women. Other clinical features include:

- Hirsutism and male pattern balding consistent with hyperandrogenism
- Irregular, heavy bleeding or even absent menstrual cycles
- Sub-fertility or infertility
- Psychological symptoms -Anxiety, depression, eating disorders, mood instability.

The pathogenesis of PCOS is complex and not completely understood. Combined increase of androgens and/or insulin creates underlying hormonal imbalance. Genetic and environmental factors influence the imbalance with other factors including obesity, ovarian dysfunction and hypothalamic pituitary abnormalities.[4] Women with genetic predisposition are at risk, triggered by environmental factors, particularly obesity.

Polycystic ovary syndrome inspite of being one of the most common endocrine syndromes still remains to be an underdiagnosed condition. [5][6] Early detection and treatment would attenuate its associated long-term effects. PCOS associates overweight or obesity in about 40-80% of patients, thus increasing the risk of metabolic syndrome, endometrial hyperplasia and endometrial cancer [7,8,9] In

recent years India has witnessed sudden increase in PCOS and infertility which just reflects the tip of iceberg problem. Ignorance, obesity, increase in a sedentary lifestyle and lack of exercise seem to be associated factor. Awareness among women about the problem is low as this comes as an incidental finding in women who come with other complaints like infertility, amenorrhea irregular menses. Incidence among adolescents is also on the rise and raised awareness may lead to early diagnosis and treatment and maybe even prevention of PCOS. [10]

METHODS

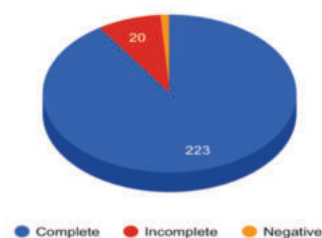
A cross sectional study of 6 months from September 2021 to march 2022 was performed on 200 women of age group 18-40 years coming to Out Patient Departments of Hind Medical College Sitapur. Institutional ethical committee approval was taken and participants were explained about purpose of the study and an informed consent was taken. Self-made questionnaire was developed and validated from the respected senior faculty. Components of questionnaire consist of disease awareness, source of awareness, presenting complaints of disease, symptom awareness complication awareness prevention modalities, willingness for weight reduction and lifestyle modification.

Subjects were randomly selected for the questionnaire or data collection before knowledge awareness intervention. women not consenting for the study and incomplete questionnaire were removed from the study.

RESULTS

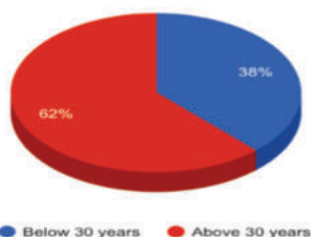
During the study interval 223 responses to the questionnaire were registered. 20 responses were incomplete and were excluded, 3 responses were excluded due to negative consent.

Total patients for questionnaire



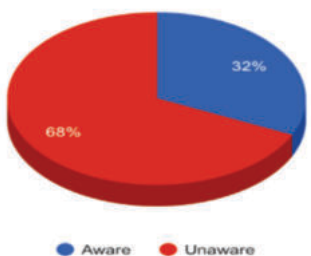
38% women were in the age group of below 30 years and 62% women in the age group of above 30 years

Age group



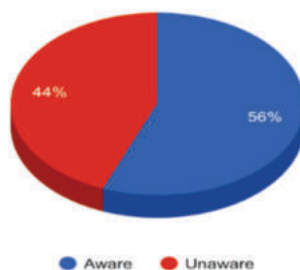
Among 200 participants, only 32% of the women were aware of the term PCOS.

PCOS awareness



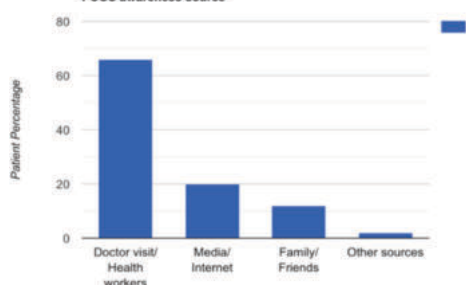
Among the patients aware of the term PCOD 44% of the patients were aware of the the organ systems involved in this disease

Awareness of involved organ system



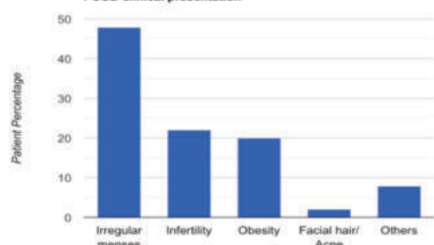
Women who knew about the term PCOS were mostly due to doctors visits/health workers accounting for 66% , Media/Internet sources accounted for 20% , Family and friends accounted 12% and 2% from other sources.

PCOS awareness source



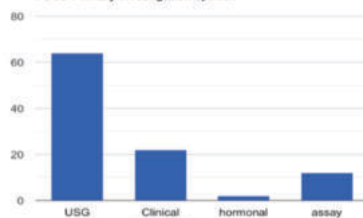
Most common presentation of PCOD according to women were irregular menses 48%, infertility 22% , obesity 20%, facial hair and acne 2% , and others 8%.

PCOD clinical presentation



64% of the women attending the clinics thought that ultrasonography was the primary investigation for the diagnosis of PCOD followed by clinical evaluation 22%, hormonal assay 2% and other 12%

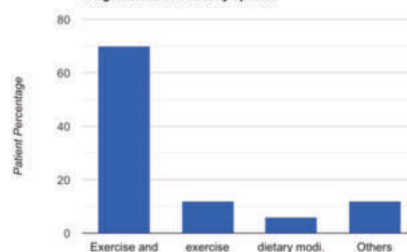
PCOD Primary investigation opinion



42% women men opined that weight reduction and lifestyle modification was the primary modality treatment for PCOD, medical treatment accounted for 39% ,surgical treatment 6%, and others 13%

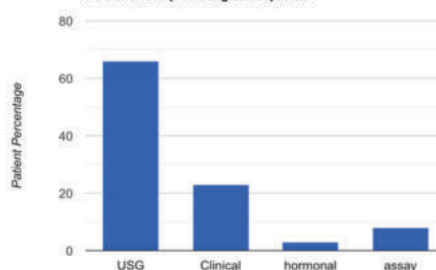
Modalities likely to be effective for weight reduction were both exercise and diet modification 70%, exercise 12%; dietary modification 6% and others 12%.

Weight reduction modality opinion



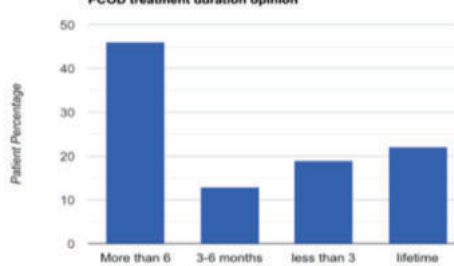
When asked about duration of treatment required for managing the disease, more than 6 months treatment was opined by 46% patients, 3-6 months by 13%, less than 3 months by 19% lifetime by 22% patients.

PCOD followup investigation opinion



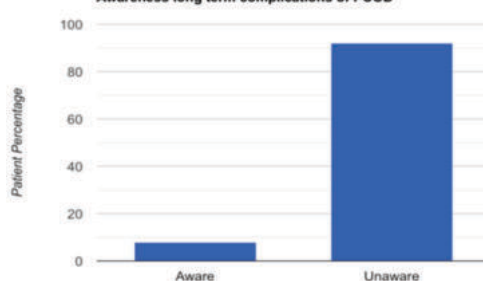
Most patients thought that best investigation for follow up was ultrasound 66%, clinical evaluation by 23%, hormonal assay by 3% and other by 8% of patients.

PCOD treatment duration opinion



92% participants were unaware of the long-term complications as hypertension, diabetes mellitus, and cardiovascular abnormality. They were mostly unaware of its relationship to early puberty and inheritance as well.

Awareness long term complications of PCOD



DISCUSSION

Polycystic ovary syndrome (PCOS) is a chronic multisystem syndrome of ovarian and endocrine dysfunction including infertility, irregular menses, insulin resistance and hyperinsulinemia, hyperlipidaemia, large and polycystic ovaries [11]. PCOS is the one of the most common hormonal disorder in women & is among the leading cause for infertility and also has the potential for other hormonal side effects. Lack of any public knowledge, awareness and education of the disease in community leads to less medical consultation and more morbidity related to the otherwise curable disease process. Community awareness regarding PCOD should be raised through inclusion in nationalised health programmes, wide public forums, structured media, education through health workers to lower the disease related morbidity.

In present study only 32% of the women were aware of the term PCOS, 44% of the subjects aware of disease knew about the organ system involved. A study by Esha in 2019 showed 38% knowledge about disease with only 26% aware it's organ system involved. [12] Another study by Patel and Rai in 2018 41% disease awareness and 46% organ system awareness [13]. A study by Pitchai in 2015 showed 21% disease awareness. [14]

A similar study by Safa showed that 50% have knowledge about the PCOS and in contrast to present study only 6 % aware about the reasons and consequences of the condition. [15]

The survey also revealed that most awareness about the disease was through doctors/health care workers followed by media and Internet resources.

Studies by Esha and Patel in 2019 and 2018 showed major source of information through friends and relatives [12,13]. Study by Pitchai et al shows information source 51% from doctor and 22% from internet [14]

Most common presentation of PCOD according to women were irregular menses 48%, infertility 22%, obesity 20%, facial hair and acne 2%, and others 8%.

Majority of women i.e. 75.5% has or had problem of acne over their face and almost 13% has excess hair growth over face or abdomen. 89% of the women have abdominal pain or discomfort. 33.5% women had regular menstrual cycle with proper bleeding. [13] Study by Upadhye JJ et al revealed that 33 % had acne, 16% had menstrual irregularities 5% had hirsutism. [16]

64% of the women attending the clinics thought that ultrasonography was the primary investigation for the diagnosis of PCOD followed by clinical evaluation 22%, hormonal assay 2% and other 12%.

42% women opined that weight reduction and lifestyle modification was the primary modality treatment for PCOD, medical treatment accounted for 39%, surgical treatment 6%, and others 13%

Modalities likely to be effective for weight reduction were both exercise and diet modification 70%, exercise 12%; dietary modification 6% and others 12%.

In a study by Pitchai et al 62% aware that exercise helps in the management of PCOS. 39% did exercise on a regular basis. 64% of the respondents aware that changing in diet or eating habits can influence in PCOS. [14] Study by Safa showed that 74 % participants knew benefits of exercise in PCOD. [15]

When asked about duration of treatment required for managing the disease, more than 6 months treatment was opined by 46% patients, 3-6 months by 13%, less than 3 months by 19% lifetime by 22% patients. Most patients thought that best investigation for follow up was ultrasound 66%, clinical evaluation by 23%, hormonal assay by 3% and other by 8% of patients

92% participants were unaware of the long-term complications as hypertension, diabetes mellitus, and cardiovascular abnormality. They were mostly unaware of its relationship to early puberty and inheritance as well. In the study by Esha most participants were unaware of the long-term complications [12].

CONCLUSION

The study shows that very small number of women are aware of polycystic ovarian syndrome. This leads PCOD to be an underdiagnosed disease and less seeking of medical attention for the disease by women. PCOD being one of the most common disease among young women, methodologies to increase disease awareness should be implemented to lower the morbidities related to the disease and its associated complications.

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