

## Original Research

### To Evaluate the Knowledge and Awareness of PCOS among Women of Known Population: A Hospital Based Study

Kheta Ram Soni<sup>1</sup>, Sudesh Agarwal<sup>2</sup>

<sup>1</sup>Senior Resident, Department of Obstetrics & Gynecology, Government Medical College, Barmer, Rajasthan;

<sup>2</sup>Professor & Head, Department of Obstetrics & Gynecology, S. P. Medical College, Bikaner, Rajasthan, India

#### ABSTRACT:

**Background:** Polycystic ovary syndrome (PCOS) is a hormonal disorder common among women of reproductive age. Women with PCOS may have infrequent or prolonged menstrual periods or excess male hormone (androgen) levels. The present study was conducted to evaluate the knowledge and awareness of PCOS among women of known population. **Material and methods:** The present study was conducted among 340 women of age group 18-25 years over the period of 6 months. Pre-designed, pre-tested, semi-structured questionnaire was used for data collection before and after knowledge awareness intervention. The data was assessed using SPSS for windows release 21.0 (SPSS, Chicago, IL, USA). **Results:** The present study shows that 144 women were aware regarding the term PCOS before intervention but after intervention 216 women were aware. Before intervention 238 women were aware regarding the cause of PCOS but 278 women were aware after intervention. Before intervention 156 women were aware regarding the organ system involved but after intervention 289 women were aware. Before intervention 209 women were aware regarding the symptoms of PCOS but after intervention 296 women were aware. Before intervention 154 women were aware regarding the lifestyle changes which can cause PCOS but after intervention 193 women were aware. **Conclusion:** The results of present study show that very less women were aware of PCOS but after intervention knowledge and awareness level of women regarding PCOS increases.

**Key words:** Polycystic ovary syndrome, menstrual, reproductive age.

Received: 30 April, 2018

Revised: 25 August, 2019

Accepted: 24 September, 2019

**Corresponding Author:** Dr. Kheta Ram Soni, Senior Resident, Department of Obstetrics & Gynecology, Government Medical College, Barmer, Rajasthan, India.

**This article may be cited as:** Soni KR, Agarwal S. To Evaluate the Knowledge and Awareness of PCOS among Women of Known Population: A Hospital Based Study. J Adv Med Dent Scie Res 2019;7(10): 147-149.

#### INTRODUCTION:

Polycystic ovary syndrome (PCOS) was first reported in modern medical literature by Stein and Leventhal who, in 1935, described seven women suffering from amenorrhea, hirsutism, and enlarged ovaries with multiple cysts. It is now recognized as a common, heterogeneous, heritable disorder affecting women throughout their lifetime.<sup>1</sup> Polycystic ovary syndrome (PCOS) is a widespread reproductive disorder that encompasses many associated health conditions and has an impact on various metabolic processes.<sup>2</sup> The three main phenotype characteristics of this condition are hyperandrogenism, polycystic ovaries, and ovulatory dysfunction.<sup>3</sup> This syndrome can also be associated with metabolic issues including obesity, insulin resistance (found in 60-80% of women with PCOS)<sup>4</sup>, hyperinsulinemia, and type 2 diabetes mellitus (T2DM).

PCOS is associated with cardiovascular problems, neurological and psychological effects on quality of life (including anxiety and depression), and breast and endometrial cancers. As many as 20% of women with infertility problems (including fecundability and early pregnancy loss) have been diagnosed with PCOS.<sup>5</sup> It is often called the most common cause of anovulatory infertility in women (Polycystic ovarian syndrome (PCOS) associated with multiple presentation in females although it is common disorder but due to lack of knowledge females often delays in getting confirm diagnosis and treatment. PCOS remains a syndrome and as such no single diagnostic criterion (such as hyperandrogenism or PCO) is sufficient for clinical diagnosis.<sup>6</sup> The present study was conducted to evaluate the knowledge and awareness of PCOS among women of known population.

**MATERIAL AND METHODS:**

The present study was conducted among 340 women of age group 18-25 years over the period of 6 months. Before the commencement of study, ethical approval was taken from the Ethical committee of the institution. Written informed consent was obtained from study participants. Pre-designed, pre-tested, semi-structured questionnaire was used for data collection before and after knowledge awareness intervention. Women of age group 18-25 years, those who gave written consent were included in the study. Women of age group of less than 18 years and more than 25 years, those who did not give written consent were excluded from the study. The data was assessed using SPSS for windows release 21.0 (SPSS, Chicago, IL, USA).

**RESULTS:**

The present study shows that 144 women were aware regarding the term PCOS before intervention but after intervention 216 women were aware. Before intervention 238 women were aware regarding the cause of PCOS but 278 women were aware after intervention. Before intervention 156 women were aware regarding the organ system involved but after intervention 289 women were aware. Before intervention 209 women were aware regarding the symptoms of PCOS but after intervention 296 women were aware. Before intervention 154 women were aware regarding the lifestyle changes which can cause PCOS but after intervention 193 women were aware.

**Table 1: Knowledge and Awareness level**

	Aware	Not aware	Total
Awareness regarding the term PCOS			
Before intervention	144	196	340
After intervention	216	124	340
Awareness regarding the cause of PCOS			
Before intervention	238	102	340
After intervention	278	62	340
Awareness regarding the organ system involved			
Before intervention	156	184	340
After intervention	289	51	340
Awareness regarding symptoms of PCOS			
Before intervention	209	131	340
After intervention	296	44	340
Awareness regarding the lifestyle changes which can cause PCOS			
Before intervention	154	186	340
After intervention	193	147	340

**DISCUSSION:**

Polycystic ovarian syndrome is an endocrine system disorder with a collection of symptoms that are found as a result of a broad- spectrum hormonal disturbance. It is considered as one of the most common endocrine disorder in women at their reproductive age and a leading cause for infertility.<sup>7</sup>

The present study shows that 144 women were aware regarding the term PCOS before intervention but after intervention 216 women were aware. Before intervention 238 women were aware regarding the cause of PCOS but 278 women were aware after intervention. Before intervention 156 women were aware regarding the organ system involved but after intervention 289 women were aware. Before intervention 209 women were aware regarding the symptoms of PCOS but after intervention 296 women were aware. Before intervention 154 women were aware regarding the lifestyle changes which can cause PCOS but after intervention 193 women were aware.

Sunanda B et al found that 76% of the samples were with average knowledge and 10.7% with good knowledge regarding polycystic ovarian syndrome.<sup>8</sup> Sills ES et al found that more than 97% (n =638) of the respondents were familiar with PCOS, while 1.9% had not been told about PCOS, and <1% were uncertain.<sup>9</sup> Usually obesity is found in more than 50% of patients diagnosed with PCOS, which is an important complication associated with PCOS.<sup>10</sup> However, this important information about obesity and its association with increasing levels of free testosterone was only known to 56.3% of the participants. It is one of the important information associated with the disease, as this association can aggravate the clinical presentation of the disease in the form of clinical hyperandrogenism and anovulation.<sup>7</sup>

**CONCLUSION:**

The results of present study show that very less women were aware of PCOS but after intervention knowledge and awareness level of women regarding PCOS increases.

**REFERENCES:**

1. Sirmans SM, Pate KA. Epidemiology, diagnosis, and management of polycystic ovary syndrome. *ClinEpidemiol.* 2013; 6(1):1-13.
2. Barthelmeck EK, Naz RK. Polycystic ovary syndrome: current status and future perspective. *Front Biosci (Elite Ed).* 2014; 6:104-19.
3. Carmina E, Oberfield SE, Lobo RA. The diagnosis of polycystic ovary syndrome in adolescents. *Am J Obstet Gynecol.* 2010;203:201.e1–201.e5.
4. Diamanti-Kandarakis E, Kouli C, Tsianateli T, Bergiele A. Therapeutic effects of metformin on insulin resistance and hyperandrogenism in polycystic ovary syndrome. *Eur J Endocrinol.* 1998;138:269–274.
5. Adams J, Polson DW, Franks S. Prevalence of polycystic ovaries in women with anovulation and idiopathic hirsutism. *Br Med J (Clin Res Ed)* 1986;293:355–359.
6. Rotterdam ESHRE/ASRM-Sponsored PCOS Consensus Workshop Group. Revised 2003 consensus on diagnostic

- criteria and long-term health risks related to polycystic ovary syndrome. *Hum Reprod.* 2004;19:41-7.
7. Sedighi, S., Amir Ali Akbari, S., Afrakhteh, M., Esteki, T., Alavi Majd, H., & Mahmoodi, Z. (2014). Comparison of lifestyle in women with polycystic ovary syndrome and healthy women. *Glob J Health Sci*, 7(1), 228-234. <https://doi.org/10.5539/gjhs.v7n1p228>.
  8. Sunanda B, Nayak S. A study to assess the knowledge regarding PCOS (polycystic ovarian syndrome) among nursing students at NUINS. *NUJHS.* 2016;6(3).
  9. Sills ES, Perloe M, Tucker MJ, Kaplan CR, Genton MG, Schattman GL. Diagnostic and treatment characteristics of polycystic ovary syndrome: descriptive measurements of patient perception and awareness from 657 confidential self-reports. *BMC Women's Health.* 2001;1(1):3.
  10. Ollila, M. M., Piltonen, T., Puukka, K., Ruokonen, A., Jarvelin, M. R., Tapanainen, J. S., Morin-Papunen, L. (2016). Weight Gain and Dyslipidemia in Early Adulthood Associate With Polycystic Ovary Syndrome: Prospective Cohort Study. *J Clin Endocrinol Metab*, 101(2), 739-747. <https://doi.org/10.1210/jc.2015-3543>.