

An Exploratory Survey To Assess The Knowledge, Practice And Prevalence Of Polycystic Ovarian Syndrome Among Women Attending Gyne OPD Of Selected Hospital Of Delhi With A View To Develop A Health Care Package On Polycystic Ovarian Syndrome And Its Management.

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Abstract: Objective: 1) To assess the prevalence of Poly Cystic Ovarian Syndrome among women attending Gyne OPD of selected hospital. 2) To assess the knowledge and practice of women with PCOS regarding Poly Cystic Ovarian Syndrome. Methodology: Exploratory survey design. A sample of 275 women of 12-49 years of age was selected by Purposive Sampling technique. A structured interview schedule, a structured knowledge interview schedule and a self-expressed practice rating scale were used to collect data Result: The prevalence of PCOS among women attending Gyne OPD of Safdarjung Hospital was found to be 10.09%. The knowledge of the women with PCOS regarding PCOS and its management was found to be inadequate with the mean score of 12.1 out of 33. Similarly the practices were also found to be inadequate with the mean score of 59.87 out of 115. Identifying the areas of inadequate knowledge and practices a Health Care Package was developed for women with PCOS.

Keywords: Knowledge, Poly Cystic Ovarian Syndrome (PCOS), Practice, Prevalence, Self Expressed Practice Rating Scale, Structured Interview Schedule.

I. Introduction

1.1 Introduction

Women are the building stones of a society. A woman owns the privilege of giving birth, raising up a family and thus creating the basic unit of society. The unhealthy food habits and lack of exercise lead to many adverse effects on the body of women during her reproductive phase. Poly Cystic Ovarian Syndrome is one such disease which puts question mark on the womanhood of a woman by taking from her the right of motherhood.

Poly cystic Ovarian Syndrome (PCOS) was originally described in 1935 by Stein and Leventhal as a syndrome manifested by amenorrhoea, hirsutism and obesity associated with enlarged polycystic ovaries. This heterogeneous disorder is characterized by excessive androgen production by the ovaries mainly. PCOS is a multifactorial and polygenic condition. It is characterized by three classic symptoms: 1) Irregular menstrual periods (80%) either oligomenorrhoea or amenorrhoea 2) Masculinization causing excessive hair growth and acne (50-70%) 3) Obesity. Additionally, because the woman does not usually ovulate, she is often infertile (75%). [1] Polycystic ovary syndrome (PCOS) is the most common endocrine disorder affecting between 6% and 8% of women in reproductive age [2]. It is associated not only with reproductive and cosmetic sequelae, but also with significantly increased risk of metabolic dysfunction including insulin resistance with consequent compensatory hyperinsulinemia, dyslipidemia, systemic inflammation, increased oxidative stress, and endothelial dysfunction [3,4]. In the long-term, women with PCOS may develop type 2 diabetes mellitus, hypertension and atherosclerosis; ultimately, they are more likely to suffer from cardiovascular and cerebrovascular diseases [5-7]. Only a few of the women diagnosed with PCOS had any information about PCOS. Many of the women did not know where to look for information. The findings of the study revealed the lack of knowledge about PCOS among women with PCOS.[8]. Women with PCOS demonstrated worsened quality of life ($p = 0.033$) and greater anxiety and depression than women without PCOS related to BMI status. Women with PCOS were more likely to have fears about future health related to weight gain, loss of femininity, loss of sexuality and infertility than women without PCOS. [9] Polycystic ovary syndrome is one of the most common (15-20%) endocrine disorders in women of childbearing age .It was found that of the 2270 infertility patients attending infertility clinic , 46.50% (1057) had PCOS.[10]

1.2 Objectives Of The Study

- To assess the prevalence of Poly Cystic Ovarian Syndrome among women attending Gyne OPD of selected hospital.
- To assess the knowledge and practice of women with PCOS regarding Poly Cystic Ovarian Syndrome
- To develop a Health Care Package on PCOS and its management.

II. Methodology

2.1 Research Design

Exploratory Survey design was used to explore the various aspects related to PCOS among women like, prevalence, existing knowledge and practices regarding PCOS and its management.

2.2 Sample

The study was conducted in Gyne OPD of Safdarjung Hospital, New Delhi. A sample of 275 women of 12-49 years of age was selected by purposive sampling technique.

2.3 Tool

Structured Interview Schedule was used to assess the background information and prevalence of PCOS. A Structured Knowledge Interview Schedule and a Self Expressed Practice Rating Scale were used to assess the existing knowledge and practice regarding PCOS and its management among women with PCOS.

2.4 Data Analysis

The data obtained was tabulated and analyzed in terms of the objectives of the study. The scores of knowledge and practice in different content areas were analyzed by rank order so as to identify the areas of inadequate knowledge and practice.

2.5 Development Of Health Care Package

On the basis of the findings of the study , a Health Care Package was developed.

Health Care Package in this study means a package including

1. Flash Cards on Causes of PCOS
2. Self-Evaluation Checklist – Daily Checklist for the patients to improve practices to manage PCOS
3. Leaflet - A Leaflet providing information on Dos and Don'ts of PCOS
4. Information booklet- A booklet providing information on PCOS, its causes, clinical features , complications, and management including lifestyle modification, medical as well as surgical management.

III. Findings And Interpretation

The prevalence of PCOS among women attending Gyne OPD of a selected hospital of Delhi was found to be 10.09%. Among the total number of women only 23% were having prior information about PCOS and most of the women (77%) had no prior information about it. Majority of the women with PCOS (63.33%) were presenting with Oligomenorrhea, 37% were obese, 57% had acne, 47% had hirsutism, 22% of those who had undergone LH: FSH ratio showed elevated levels , only 13% of those who had undergone investigation showed abnormal serum testosterone levels.

**Table – 1: Mean, Median And Standard Deviation of Knowledge Scores of Women with PCOS
N= 30**

Variable	Mean	Median	Standard deviation
Knowledge scores	12.1	11	4.9

Maximum Possible Score = 33

The mean knowledge scores of subject was 12.1 out of 33 i.e. 36.67%

Table – 2: Knowledge Area Wise Mean & Rank Order of Knowledge Scores of Women with PCOS.

S..no.	Knowledge area	Total score	Modified mean	Rank
1.	Stress management	30	0.5	I
2.	General management	12	0.4	II
3.	Concept and clinical features	55	0.367	III
4.	Complications of PCOS	83	0.346	IV
5.	Exercise	62	0.344	V
6.	Causes of PCOS	41	0.342	VI
7.	Assisted reproductive techniques	6	0.2	VII
8.	Dietary modifications	73	0.033	VIII

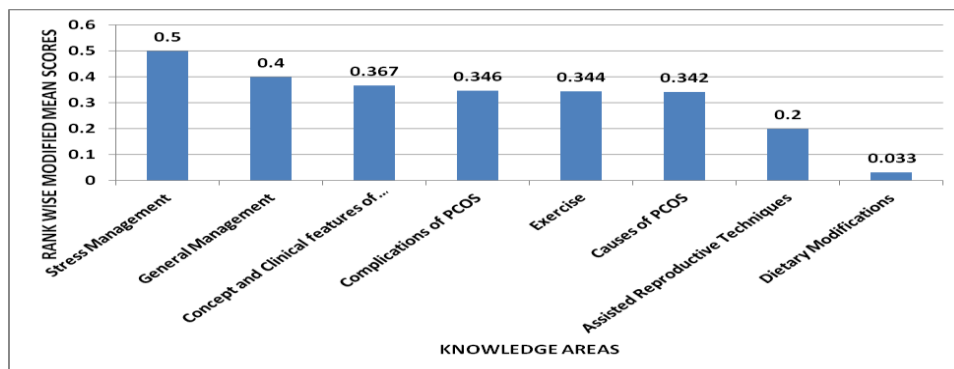


Figure No. 1: Bar Graph Showing the Knowledge Area Wise Modified Mean & Rank Order of the Knowledge Scores of Women with PCOS

Table 2 and Figure no. 1 show that the women had least knowledge in the dietary modifications needed in Management of PCOS and assisted reproductive techniques. The knowledge area - stress management ranked I, followed by General Management (II), concept and clinical features (III), complications of PCOS (IV), Exercise (V) and Causes of PCOS (VI)

Table – 3: Mean, Median & Standard Deviation of Self Expressed Practice Scores of Women with PCOS
N= 30

Variable	Mean	Media	Standard deviation
Expressed practice scores	59.87	57	9.55

Maximum Possible Score = 115

Table 3 shows that the mean and median of practice scores of subject were 59.87 and 57 respectively. The standard deviation is 9.55.

Table – 4: Practice Area Wise Mean & Rank Order of Practice Scores of Women with PCOS.

S.no.	Practice area	Total score	Modified mean	Rank
1.	Causes of PCOS	108	3.6	I
2.	Stress Management	484	2.689	II
3.	Exercise	538	2.562	III
4.	Concept and Clinical features	152	2.533	IV
5.	Dietary Management	438	2.433	V
6.	Complications	69	2.3	VI

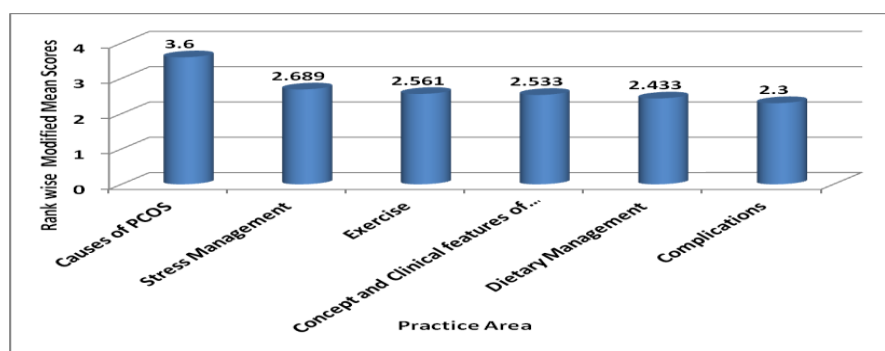


Figure No.2 : A Cylindrical Graph Showing the Practice Area Wise Modified Mean & Rank Order of the Practice Scores of Women with PCOS

Table no. 4 and figure no. 2 show that the women with PCOS perform least practices in the area of managing the complications with rank VI and dietary management of PCOS which ranked V whereas the practices in managing the causes and stress rank I and II respectively.

IV. Discussion

In the present study, researcher assessed the prevalence, knowledge and practices of women with PCOS. The present study showed the prevalence of PCOS to be 10.09% among women. Shannon, Maureen. (2012) conducted a study which showed that PCOS affected 5% to 10% of women of reproductive age. [11] Similarly in a study conducted by Tehrani FR, et al (2011), on reproductive aged women in Tehran, the prevalence of PCOS was found out to be 8.5%. [12] The present study show the presence of oligomenorrhea,

obesity, acne and hirsutism among women with PCOS. The similar findings were obtained by Sundararaman PG. et al. (2008) in his study on psychosocial aspect of women with polycystic ovary syndrome from south India in which the phenotypes identified were oligomenorrhea, weight gain, acne and hirsutism.[13] The researcher in the present study found inadequate knowledge regarding PCOS and its management among women with PCOS. These findings are consistent with the findings of the study conducted by Avery. (2013) in which it was found that there is lack of knowledge among women regarding PCOS.[8] It was found in the present study that the women with PCOS had inadequate practices regarding PCOS and its management, which included faulty dietary habits, lack of physical activities, and stress. These findings are consistent with the findings of studies conducted by Ahmadi, Afsane. , et. al. (2013) , Eleftheriadou, M., et. al. (2012) which showed that patients with PCOS consume more calories and more fat in their diets. Eleftheriadou, M., et. al. (2012) found that girls with PCOS engaged in physical activities less than controls. [14-15]

V. Conclusion

Reproductive Health of women is of prime concern for every nation to lay down the foundation of a healthy society. Poly Cystic Ovarian Syndrome is the most common endocrine disorder in the females of reproductive age. With varied clinical picture in different patients, it causes physiological, psychological and social distress not only to the diseased but also to their family members. With rise in the number of cases of PCOS, it becomes imperative to explore the disease, its varied clinical presentation, and the existing knowledge and practices to manage PCOS among women diagnosed with PCOS. Every patient has a right to know about his/her health and disease condition so that he/she can participate in the healing process by acting as a self-care agent. The best way to do so is to directly ask the patients about their clinical features and the knowledge and practices they have about PCOS, so that the necessary information can be imparted to them. The present study showed that Poly Cystic Ovarian Syndrome was prevalent among the women attending the Gyne OPD of Safdarjung Hospital. The women with PCOS were found to have inadequate knowledge and Practices regarding PCOS and its management. There is need of well-designed and comprehensive information and education among females of reproductive age group about PCOS and early detection of PCOS. The existing health services have emphasized on the medical and surgical management of Poly Cystic Ovarian Syndrome. Lifestyle modifications which constitute an important component of management have been underestimated. Nurses working in Gynecology department (OPD & Ward) should take up the responsibility of educating and motivating the females about the lifestyle modifications to manage PCOS.

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