Knowledge & Factors Associated With Polycystic Ovarian Syndrome among Rural Reproductive Age Group Women

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ABSTRACT

Background of the Study: "Women's reproductive health is a state of complete physical, mental and social wellbeing and not merely the absence of infirmity, in all parts are connected to the reproductive system and its function, processes and reproductive health." Polycystic ovarian syndrome is a condition in which woman has an imbalance of female sex hormones. This may lead to changes in the menstrual cycle, cyst in the ovary, failure to conceive and other health problems. It is a common health problem among teenagers and young women. It affects 5% to 10% of women in their reproductive years.

Aims: The aim of the study was to Knowledge & Factors Associated With Polycystic Ovarian Syndrome among Rural Reproductive Age Group Women.

Material and Methods: A descriptive survey design and quantitative approach was adopted to achieve the goal of the study. The study was conducted at three Rural area villages of Waghodia taluka. Total 100 reproductive aged women were recruited.Self structuredknowledge questionnaire and checklist were utilized to assess knowledge and factors associated with PCOS.

Result: Out of 100 subjects, the prevalence of PCOS was 5. The mean percentage of knowledge score in rural women it was 43.86%.Majority Factors associated which affect the polycystic ovarian syndrome of Reproductive age group women. The researchers have identified that abnormal hair growth, family history of diabetes, acne, irregular menstruation,

BMI > normal and high calorie diets are more prevalent factors among subjects. 2/5th rural having factors associated with PCOS.

Conclusion: Study concluded that women from rural area were having Average knowledge. Frequency of factors associated with PCOS also found to be small amount in rural setting.

Keywords: Knowledge, Factor associated, Polycystic ovarian syndrome, Reproductive age group women, Rural area.

INTRODUCTION

Early diagnosis and treatment can help control the symptoms and prevent long-term problems.[1]there is no cure for PCOS, but controlling it lowers risks of infertility, miscarriages, diabetes, heart disease, and uterine cancer. Behaviour and life style modifications are important part of treatment for PCOS.[2] Women's with this peculiar syndrome experiences complex of symptoms including distress, depression, anxiety which affect quality of life of patients and definitely accounts for significant healthcare costs.[3] Diagnosis of PCOS is now largely based on the Rotterdam criteria, which are inclusive of the original National Institutes of Health (NIH) criteria and require two of three key features: an ovulation, clinical and/or biochemical hyper androgens and polycystic ovaries on ultrasound.[4]

In approximately 20% of the cases, it may be incidentally found on ultrasound examination in asymptomatic patients .[5]Sometimes the journey to a diagnosis of PCOS is a long and frustrating one, being diagnosed with the PCOS can generate a range of feelings and emotions, often these are similar to a grief reaction.[6] The small ovarian follicles are believed to be the result of disturbed ovarian function with failed ovulation, reflected by the infrequent or absent menstruation that is typical of the condition.[7]. Public information and awareness of thesymptoms and the serious nature of the disorder are crucial to identifying women in need of treatment. Every year September month is the National PCOS Awareness Month.[8] Public information and awareness of thesymptoms and the serious nature of the disorder are crucial to identifying women in need of treatment. Every year September month is the National PCOS Awareness Month.[9]

MATERIAL AND METHOD

Descriptive survey design was adopted for the present study. 100 reproductive age group women were recruited by non-probability convenient sampling method at three

villages of Waghodia taluka and data was collected by October 2019. The study protocol was approved from ethical committee of Sumandeep Vidyapeeth institutionalethical committee. Data collection permission was obtained from chief district health officer for Rural area from reproductive age women. The Data collection tools included three sections: socio-demographic, structured knowledge questionnaire and Checklist. And in the data collection aged ofreproductive age group women was between 16-35 years are selected for study. Data were analysed using SPSS-22 software. Descriptive statistics (mean, standard deviation and chi-square) and inferential statistics (chi-square test) were used.

RESULTS

In the present study, the highest (32)percentage of reproductive age group women were in the age group of 21-25 Years, majority (36) of reproductive age group women had menarche at the age of 10-13 year and most them were (77) having Hindu religion. There was marginally difference between education statuses of women. Maximum number of reproductive age group women was belonging from (49) labour segment and most of them (59) were married. Data reveals maximum (60) women belongs to nuclear family and the socio economic status of majority participants (64) per month was<Rs. 5000. Minor participants (74) were having more than 1 month interval of menstrual cycle and 16% of them having complaint of severe dysmenorrhoea.

Table 1: Description of mean, SD and mean percentage of analysis knowledge score of Reproductive age group women of selected Rural area.   N=100

Sr.No	Knowledge aspect	Maximum	Mean	Mean Percentage	SD
1.	Introduction	6	2.96	49%	0.66
2.	Risk Factors	3	1.32	44%	0.83
3.	Causes	4	1.76	44%	0.86
4.	Sign and symptom	4	1.76	44%	0.95
5.	Diagnosis & Treatment	6	2.36	39%	1.13
6.	Management	7	3.00	43%	1.39
	Overall score	30	13.16	43.86%	0.496

We find significant increase of knowledge in the Rural sample in the categories of Introduction, Diagnosis & Treatment, and Management. In other categories, though there is increase in knowledge in Rural.

Table 2: Reproductive age group women to the analysis Knowledge level on polycystic ovarian syndrome of Ruralarea.

			Rural
Knowledge Category	**Inadequate**	Frequency	16
		Percentage	**16.0**
	Moderate	Frequency	84
		Percentage	**84.0**
	Adequate	Frequency	0
		Percentage	**0.0**
Total		Total Frequency	100
		Total Percentage	**100.0**

Above mentioned data shows that most of the participants having moderate level of knowledge about polycystic ovarian syndrome.

Table 3: Factors associated with Rural population is given in the table below.

Sr. No	Factors	Total Frequency	Total Percentage
1	**BMI > Normal**	34	3.4
2	**Irregular of menstruation**	38	3.8
3	**Abnormal hair growth on body**	61	7.5
4	**History of diabetes**	60	7.1
5	**Sudden weight gain**	46	5.7
6	**Hyper pigmentation**	49	6.1
7	**Acne**	54	6.7
8	**High calorie diet**	33	4.1

The majority Factors associated are BMI > Normal,Irregular of menstruation hair growth on body, family history of Diabetes, sudden weight gain, hyper Pigmentation, Acne, High calorie diet in Rural area.

Chi square was calculated to examine the association between Knowledge score of polycystic withselected Demographic Variable.It is revealed that there is significant

association found between knowledge score with Education Qualification, Occupation, Marital Status, Socio economic status and BMI. There was no significant association found between knowledge score with Age, Religion and Types of Family.

DISCUSSION

The present study revealed that women were having moderate level of knowledge regarding PCOS. This same type of findings present in the studySunandaB., SabithaNayakwhere all samples were moderately knowing about PCOS.[10]The study conducted by Deswal R. Out of 2400 samples from urban and rural area prevalence of 67 of women with PCOS resided in urban regions and 27 in rural regions.[11]The present study revealed that out of 100 samples from rural area prevalence of 5 of women with PCOS resided in rural regions. The study conducted by Parmar Neha their data shows that there was a significant association with knowledge score with selected demographic variables.[12]the present study also revealed that the demographic variables like education, occupation, socio economic status weresignificantly associated with knowledge score.

Limitations: The study is limited to few Vadodara distract sample size and number of subject's limits generalization of the study.

CONCLUSION

The study findings shown thatOut of 100 subjects, the prevalence of PCOS was (5). The researchers have identified that abnormal hair growth, family history of diabetes, acne, irregular menstruation, BMI > normal and high calorie diets are more prevalent factors among subjects. Study concluded that women from Rural area were having averge knowledge. Frequency of factors associated with PCOS also found to be rural setting. Early identification by health care team is very important for prevention of complications. Further reresearch is needed to identify effective strategies for using primary care for recognizing, diagnosing, and treating regarding risk factors of PCOS among the reproductive age group women.

Ethical approval:

Since the study involved human subjects, a formal ethical approval received from Sumandeep Vidyapeeth institutional ethical committee.

Informed Consent:

Informed consent was obtained from participants and assured for anonymity.

Declaration of Interest:

The author declares that there is no financial and personal relationship with other people and organizations.

Conflict of Interest:

The authors declare no conflict of interest.

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REFERENCE

1. Bhattacharya S M, Metabolic syndrome in females with polycystic ovary syndrome and international diabetes federation criteria.2008 Feb; 34(1):62-6.

2. DhitalAD, Badhu B. Effectiveness of structured teaching programme inimproving knowledge and attitude of school going adolescentsonreproductive health. Kathmandu University Medical Journal2005;3(12):380-3.

3. Zangeneh FZ, Jafarabadi M, Naghizadeh, Abedinia N, Haghollahi F. Psychological Distress in Women with Polycystic Ovary Syndrome from Imam Khomeini Hospital, Tehran. J ReprodInfertil. 2012;13(2):111–5.

4. Lujan ME, Chizen DR, Pierson RA. Diagnostic Criteria for Polycystic Ovary Syndrome: Pitfalls and Controversies. J ObstetGynaecol Can. 2008;30(8):671–9.

5. Vijayan CP, Sonia A. Prevalence of Polycysic Ovary Syndrome among students of a teaching collegiate hospital. Health Sciences 2013;2(1):JS004A.

6. Yildiz BO, Azziz R. Impact of obesity on risk for PCOS. The Journal of Clinical Endocrinology andMetabolism2008 Jan;93(1):162-8.

7. Majundar A, Singh TA. Comparison of clinical features and health manifestation in lean v/s obese Indian women with PCOS. Journal of HumanReproductive Sciences 2009 Jan;2(1):12-7.

8. FaziaNavas. The World Health Organization criteria for classification of an ovulation include the determination of oligomenorrhea (menstrual cycle >35 days) .geneva: WHO; 2011.

9. Nidhi R, Nagaratna R, Amrithanshu R. Prevalence of polycystic ovariansyndrome in Indian adolescents. 2011Aug; 220-4.

10. Sunanda B, Nayak S. A Study to Assess the Knowledge Regarding PCOS (Polycystic Ovarian Syndrome) among Nursing Students at NUINS. Journal of Health and Allied Sciences NU. 2016 Sep;6(03):24-6.

11. Deswal R, Nanda S, Ghalaut VS, Roy PS, Dang AS. Cross sectional study of the prevalence of polycystic ovary syndrome in rural and urban populations. International Journal of Gynecology& Obstetrics.