



A CROSS-SECTIONAL STUDY ON KNOWLEDGE AND ATTITUDE ABOUT PCOS

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ABSTRACT

PCOS is the emerging endocrine disease in women of reproductive age. The knowledge and attitudes of the adolescent females in the Shivamogga district about PCOS were evaluated through a cross-sectional survey. The data from the voluntary surveys was collected using the structured prevalidated questionnaire. Calculating the proportion of response allows for the display of results. There was a moderate level of knowledge (68%) and attitude among the participants. There was a strong association between knowledge level, attitude and socio-demographic characteristics such as home location, mother's educational level, and participant age. The conclusion of our study emphasises the necessity of awareness campaigns given that the community under study still has information gaps.

KEYWORDS: PCOS, Knowledge and attitude.

INTRODUCTION

A hormonal abnormality called polycystic ovarian syndrome is most frequently found in females of adolescent and early adulthood age period. Data from a recent study indicate that roughly 20% of Indian women are affected by this illness.^[1]

The underlying causes of this condition are complex and include genetic factors, stress, and a poor diet. PCOS can show up in many different ways, including anovulation, oligomenorrhea, hirsutism, acne, and weight gain. Over time, these symptoms raise the risk of metabolic, endocrine, and cardiovascular problems.^[2]

A study regarding knowledge, attitude, and perception of PCOS among females of reproductive age is required due to its peak prevalence in recent years and severity, risks connected with it.

OBJECTIVES

- To assess and analyze the knowledge, attitude and awareness towards PCOS among college students.
- To determine the association between knowledge and attitude of adolescent girls.

MATERIALS AND METHODS

Study population

Target population of this study consisted of pre-university and college girls of age between 17 to 22 years of Shivamogga District.

Sample size and selection criteria

Random sampling technique was used to select the subjects. 150 volunteers were included in the study after obtaining informed consent from them.

Study design and setting

This study was a descriptive cross sectional study conducted from January to March 2023, among college students of Shivamogga dist.

Variables

Independent variables: this study has no independent variables

Dependent variables: in this study the dependent variables are on knowledge.

Demographic variables: in this study the Socio-demographic dependent variables on knowledge includes age, educational status and previous knowledge on PCOS and mother's education.

Study tool

A pretested self-guided structured questionnaire was used for data collection. In first part of the questionnaire socio-demographic details of the study population was collected. In next section questions related to knowledge of PCOS was included. The content validity of this questionnaire was made by three physicians. In last section modified Likert scale was used to assess the attitude of study population towards PCOS.

Ethical permission

The aims and objectives of the study were explained to study population in regional language and informed consent was obtained prior to collection of data.

Sample size

Sample size was 150 and is calculated using the formula $n = N / I + N (e)^2$ with 5% error

Inclusion criteria

1. Participants of age group 17 or above.
2. Participants willing to take part in the study.

Exclusion criteria

1. Participants age less than 17 years old
2. Antenatal women
3. Adolescent girls who are not willing to participate in this study
4. Student who are receiving treatment for PCOS

RESULTS

Around 150 members were participated in this study of aged 17 years and above. The results were analyzed based on responses collected and tabulated below. Socio-demographic profile and characteristics of the presenting participants includes age, education profile, residence (rural/urban), diet, BMI.

Demographic details	No of Participants	n(%)
Age in years	17	7
	18	17
	19	15
	20	19
	21	20
	22	23
BMI	Under weight	11
	Normal	81
	Over weight	8
Diet	Vegetarian	39
	Non vegetarian	61
Education	Pre university	23
	Graduation	54
	Postgraduate	23
Residence	Rural	24
	Urban	76
Previous information about PCOS	Yes	73
	No	27
Source of information	Family members	11
	Friends	30
	Mass media	34
	Illiterate	15
Mother education	Schooling	12
	Pre university	31
	Graduate	35
	Post graduate and above	7

To assess the knowledge of Polycystic Ovarian syndrome among the study participants open and close ended questions were asked. The knowledge was tested by using 16 questions, of which 8 were about basic information of the disease condition, 5 questions were about risk factors and causes and remaining questions related to complication of PCOS.

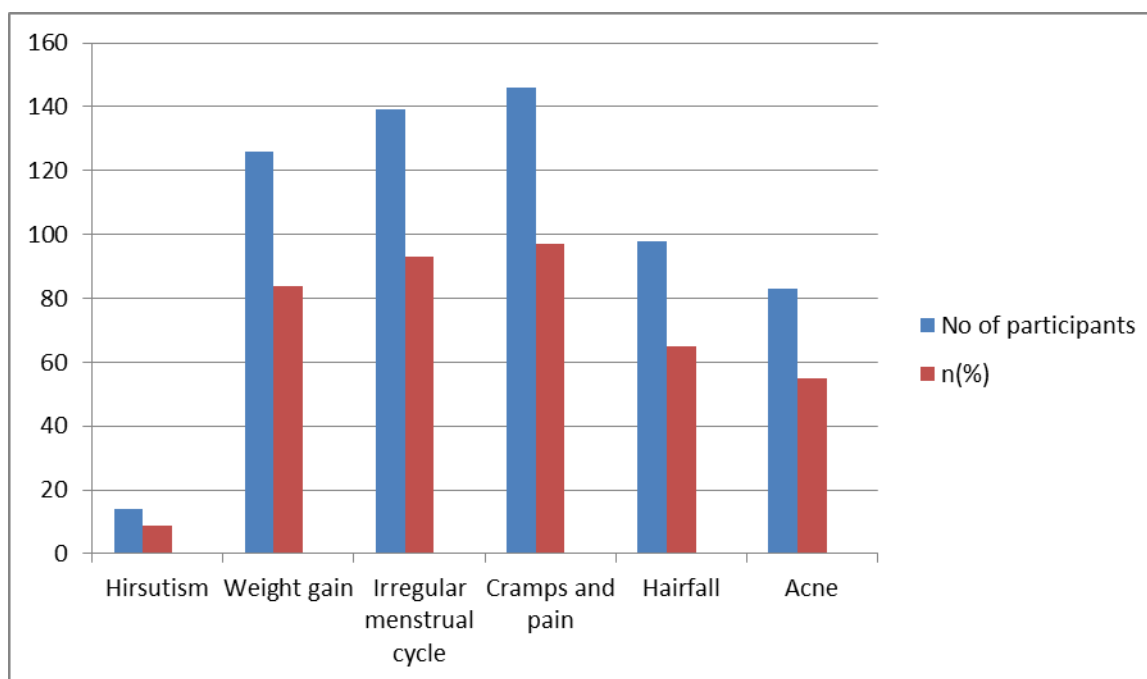
Table 2 describes overall knowledge of the study population about PCOS. Around 68% of the study population had good knowledge about the condition, correct responses to different questions is tabulated in the below column.

Questions	No of participants who gave correct answers (n)	(%)
1. Expand PCOS	114	76
2. PCOS definition	136	91
3. The organ affected by PCOS is	126	84
4. The major risk factor for PCOS is	100	66
5. The key symptom of PCOS is	29	19
6. The confirmatory diagnostic test for PCOS is	64	42
7. The possible complication of PCOS is	128	85
8. The primary treatment for PCOS is	96	64
9. The food that should be avoided in PCOS is	139	93
10. How frequently exercise should be carried out	131	87
11. Mental stress may cause PCOS	121	81
12. PCOS may cause other lifestyle disorders.	129	86
13. Sedentary lifestyle may cause PCOS	79	53
14. Possible complications of PCOS are	66	44
15. Genetic makeup is also a risk factor for PCOS	114	76
16. Environmental factors may contribute for PCOS	64	43

Symptoms

Study participants reported hirsutism, weight gain, irregular menstrual cycle, cramps and pain of abdominal

and pelvic region during menstrual cycle and hair fall as the known symptoms of PCOS and it is depicted in the graph no 1



Attitude and perception of study population was analysed by using modified Likert scale as depicted in the below table. Overall positive attitude towards PCOS was seen among study population.

Modified **Likert scale** was used to assess the perception of participants regarding PCOS.

Sl no	Statement	SA n(%)	A n(%)	U n(%)	D n(%)	SD n(%)
1	I believe PCOS is an illness like any other illness	32 (21)	61 (41)	11 (7)	43 (29)	3 (2)
2	I believe PCOS is a long term illness in one's life	6 (4)	30 (20)	28 (19)	63 (42)	22 (15)
3	PCOS women should get married early	2 (1)	11 (7)	7 (5)	49 (33)	81 (54)
4	In PCOS irregular menses/periods is a major problem	83 (55)	64 (43)	3 (2)	0 (0)	0 (0)
5	Weight reduction is a mode of effective treatment	21 (14)	75 (50)	51 (34)	2 (1)	1 (0.6)
6	PCOS women will be more concerned about being overweight	32 (21)	82 (55)	21 (14)	13 (9)	2 (1)
7	Hormonal therapy may be used to treat PCOS	22 (15)	29 (19)	36 (24)	61 (41)	2 (1)
8	PCOS does not require any treatment	0 (0)	11 (7)	23 (15)	20 (13)	96 (64)
9	PCOS women can have a successful pregnancy	10 (7)	53 (35)	68 (45)	11 (7)	8 (5)
10	Psychological problems are associated with PCOS.	21 (14)	64 (47)	32 (21)	23 (15)	0 (0)

SA - strongly agree, A- agree, U - Uncertain, SD - Stronly disagree, D - Disagree.

DISCUSSION

The current study aims to evaluate adolescent girls' knowledge and attitudes on PCOS and to investigate the relationship between socio-demographic characteristics and knowledge and attitudes. Since PCOS is a new public health concern, the information from our study is useful in developing intervention and education initiatives.

In this survey, participants had a moderate degree of knowledge (68%) on average. The age range of 20 to 22 years demonstrated a favourable connection with knowledge. In contrast, Bharathi et al.'s study in Tamil Nadu,^[3] where knowledge of the study population was 95%, and another study by Deep et al. in North India,^[4] displayed the same data, produced slightly better results than this one.

The participants in the urban population had greater knowledge of PCOS as compared to the rural population, and these findings are consistent with a study conducted by Sheelamma in Hoshangabad, Madhya Pradesh, India.^[5] The level of education is crucial for gaining awareness and knowledge of PCOS. Graduates and postgraduates in this study had superior knowledge than the other study group, and Das et al.'s study in Sikkim found a similar pattern of data.^[6]

Our study clearly shows that people who had prior exposure to PCOS information through friends, family, or the media had better knowledge and attitudes. We also discovered that mothers' education levels had a favourable effect on the research population's knowledge.

CONCLUSION

In this study, we observed that level of knowledge on PCOS among adolescence girls of Shivamogga district is still low when compared to studies conducted in different parts of India. Since population are still in grey zone, our study emphasized the need of health education and awareness programs that to be incorporated in education system.

Conflict of interest: None.

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