

Assessment of Knowledge, Awareness and Risk Factors of PCOD Among College-going Girls in Sundargarh, Odisha: A Cross Sectional Study

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ABSTRACT

Polycystic Ovarian Disease (PCOD) is one of the most common endocrine disorders affecting adolescent and reproductive-age women and is increasingly associated with unhealthy lifestyle practices, stress, and dietary habits. Adequate awareness regarding its causes, symptoms, risk factors, and preventive measures is important for early diagnosis and management. The present study aimed to assess the knowledge, awareness, and risk factors related to PCOD among college-going girls in Sundargarh, Odisha. A cross-sectional descriptive research design was adopted among 350 female students aged 16–24 years selected through convenience and purposive sampling techniques. Data were collected using a structured questionnaire and analyzed using descriptive statistics such as frequency, percentage, mean, and standard deviation. The findings revealed that the majority of respondents had a moderate level of knowledge regarding PCOD, while awareness related to symptoms, causes, lifestyle and dietary determinants, and personal and family history was found to be inadequate. Risk classification analysis indicated that most respondents belonged to the moderate-risk category due to insufficient awareness and knowledge. The study concludes that there is a need for effective health education and awareness programmes to improve knowledge regarding PCOD and encourages early identification and preventive practices among young women.

Keywords: PCOD, College-going girls, Knowledge, Awareness, Risk factors, Lifestyle factors

INTRODUCTION

Polycystic Ovarian Disease (PCOD), more appropriately termed Polycystic Ovary Syndrome, is one of the most common endocrine disorders among women of reproductive age worldwide. It is characterized by ovulatory dysfunction, hyperandrogenism, menstrual irregularities, and polycystic ovarian morphology. In addition to reproductive manifestations, PCOS is strongly associated with metabolic abnormalities such as insulin resistance, obesity, dyslipidemia, and increased long-term risk of type 2 diabetes mellitus and cardiovascular disease (Teede *et al.*, 2018; Azziz *et al.*, 2016). PCOS is also associated with adverse reproductive outcomes including infertility and poor pregnancy outcomes (Boomsma *et*

al., 2008). Psychological complications including anxiety, depression, poor body image, and reduced quality of life are also frequently reported among affected women (Dokras *et al.*, 2018). Thus, PCOS is now recognized as a significant reproductive and public health issue globally.

The reported prevalence of PCOS varies according to diagnostic criteria, ethnicity, and study population. International estimates suggest that approximately 6% to 20% of women of reproductive age may be affected depending on whether NIH, Rotterdam, or AE-PCOS criteria are used (Bozdag *et al.*, 2016). In India, several community and institutional studies indicate a growing burden of PCOS among adolescents and young adults, largely linked with urbanization, sedentary behavior, unhealthy food patterns, stress, and increasing overweight

or obesity (Nidhi *et al.*, 2011; Jabeen *et al.*, 2022). A recent systematic review and meta-analysis reported a substantial prevalence of PCOS among Indian women, emphasizing the increasing national burden of the disorder (Bharali *et al.*, 2022). Recent Indian studies have highlighted that many young women remain undiagnosed until symptoms become severe or fertility concerns arise (Jabeen *et al.*, 2022).

Awareness and knowledge regarding PCOS are crucial for early detection, treatment adherence, and prevention of long-term complications. Young women who understand common symptoms such as irregular menstruation, acne, hirsutism, weight gain, and difficulty in conception are more likely to seek timely medical consultation. Menstrual problems among adolescent girls are often ignored or poorly managed due to lack of awareness and stigma surrounding reproductive health issues (Ahmed *et al.*, 2024). Lifestyle modification, including regular physical activity, weight management, healthy dietary practices, and stress reduction, is considered first-line management for many women with PCOS (Teede *et al.*, 2018; Al Khalifah *et al.*, 2015). However, studies from India have repeatedly shown inadequate awareness, misconceptions, and poor health-seeking behavior related to PCOS among adolescents and college-going girls (Jabeen *et al.*, 2022; Singh *et al.*, 2018). Educational intervention studies have shown that structured improve awareness regarding PCOD among adolescent girls (Anitharajendrababu and Abraham, 2017). Social stigma surrounding menstrual and reproductive health issues may further delay diagnosis and care.

Knowledge regarding PCOS is influenced by multiple determinants including age, education, socioeconomic status, residence, family history, access to healthcare, and exposure to digital or mass media sources. Women with higher educational attainment and better healthcare access often demonstrate greater awareness than those from underserved communities (Jena *et al.*, 2020). Therefore, identifying determinants of awareness is essential for developing targeted health education programmes and region-specific interventions.

Sundargarh is an important district of Odisha with a diverse young female population comprising students, workers, and homemakers from urban, peri-urban, and rural settings. Despite increasing concern regarding lifestyle and reproductive disorders, there is limited published evidence on awareness and knowledge of

PCOS among young women in this region. Local dietary habits, healthcare accessibility, educational opportunities, and cultural perceptions may influence understanding and management of the condition. To the best of my knowledge, this is the first study to evaluate the level of awareness towards PCOD among young women. The result of this study can help to change the approach of the education system in Odisha. Therefor educating college going girls, adolescent girls about the symptoms, risk factors, and prevention of PCOD/PCOS can be a significant help in improving women's community health in the future.

Hence, the present cross-sectional study was undertaken to assess awareness and knowledge of PCOS and its determinants among young women in Sundargarh, Odisha. Findings from the study may support policymakers, healthcare professionals, and educational institutions in designing evidence-based awareness campaigns, screening initiatives, and preventive strategies to improve women's reproductive health outcomes in the region.

Objectives of the study

1. To assess the knowledge and awareness regarding general, medical, lifestyle, and dietary aspects of Polycystic Ovarian Disease among young women.
2. To evaluate the personal and family history related to PCOD and classify respondents based on associated risk factors.
3. To categorize respondents according to their overall level of knowledge, awareness, and risk classification related to PCOD.

METHODOLOGY

The present study employed a cross-sectional descriptive research design to assess the knowledge, awareness, and risk classification of Polycystic Ovary Disease among adolescent and young female students in Sundargarh. The study was conducted in two government institutions Government Women's College, Sundargarh, and Government College, Sundargarh to represent the college-going female population. The study population comprised female students aged 16–24 years, and a total of 350 respondents were selected using a non-probability sampling method, specifically convenience and purposive sampling, and willingness to participate. Data were

collected using a structured questionnaire developed from relevant literature, covering knowledge and awareness of PCOD (symptoms, causes, and complications), lifestyle factors, dietary practices, and personal and family history. Responses were recorded on a three-point scale (yes/no/don't know), where correct responses were assigned a score of 1 and incorrect or "don't know" responses were scored as 0. Mean knowledge scores and percentage distribution were used to assess awareness levels. Further, respondents were classified into low, moderate, and high-risk categories based on lifestyle and dietary factors as well as personal and family history, using a conceptual framework. Data collection was carried out after obtaining permission from the principals and faculty members, and verbal consent was obtained from all participants. The questionnaires were administered in classroom settings with necessary guidance. The collected data were coded and analyzed using SPSS, and descriptive statistics such as frequency, percentage, and mean scores were used for analysis. The results were presented in tables and charts for interpretation.

RESULTS AND DISCUSSION

Results of the study were tabulated and analyzed as follows:

Table 1 presents the socio-demographic characteristics of the 350 respondents included in the study. With regard to age distribution, the majority of the respondents, 61.72%, belong to the age group of 19–21 years, followed by 28.86% in the age group of 16–18 years, while only 9.42% belong to the age group of 22–24 years. This indicates that most of the respondents were in the late adolescent and early adulthood stage. Regarding marital status, an overwhelming majority of respondents (94.28%) were unmarried, whereas only 5.72% were married. This finding is expected considering that the study population consists primarily of college-going girls. With respect to the number of siblings, the highest proportion of respondents (43.15%) reported having 1–2 siblings, followed by 36.29% with 2–3 siblings. A comparatively smaller proportion of respondents had 3–4 siblings (15.42%), while only 5.14% reported having more than four siblings. This suggests that most respondents belonged to small to medium-sized families. In relation to ordinal position within the family, 39.8% of respondents were first-born children, followed by 34%

Table 1: Socio-Demographic information of the respondents (N=350)

Sr. No.	Particulars	Frequency	Percentage (%)
1.	Age Group		
	16-18 years	101	28.86
	19-21 years	216	61.72
	22-24 years	33	9.42
	Total	350	100
2.	Marital status		
	Married	20	5.72
	Unmarried	330	94.28
	Total	350	100
3.	No of Siblings		
	1-2 Nos	151	43.15
	2-3 Nos	127	36.29
	3-4 Nos	54	15.42
	Above 4 Nos	18	5.14
	Total	350	100
4.	Ordinary Position		
	1 st	139	39.8
	2 nd	119	34
	3 rd	63	18
	Any other	29	8.2
	Total	350	100
5.	Social Group		
	GEN	106	30.3
	OBC	87	24.8
	SC	58	16.6
	ST	99	28.3
	Total	350	100
6.	Religion		
	Hindu	221	63.15
	Muslim	40	11.42
	Christian	72	20.57
	Any others	17	4.86
	Total	350	100.0

who were second-born, while 18% and 8.2% occupied third and other birth positions, respectively. This indicates that a considerable proportion of respondents belonged to earlier birth order categories. Regarding social group distribution, the highest proportion of respondents belonged to the General category (30.3%), followed by Scheduled Tribe (ST) respondents (28.3%) and Other Backward Class (OBC) respondents (24.8%). The lowest proportion belonged to the Scheduled Caste (SC) category (16.6%). This reflects a relatively diverse representation of social groups among the study participants. With regard to religion, the majority of respondents (63.15%) belonged to the Hindu religion,

Sr. No.	Statements	Yes (N, %)	No (N, %)	Do not know (N, %)	Total (N, %)
1.	Knowledge on meaning of PCOD.	95 (27.14)	75 (21.43)	180 (51.43)	350 (100)
2.	Awareness regarding the meaning of polycystic ovaries as the presence of multiple cysts in the ovary.	46 (13.14)	48 (13.72)	256 (73.14)	350 (100)
3.	Awareness that ovarian cysts are one of the common signs of PCOD.	48 (13.71)	53 (15.14)	249 (71.15)	350 (100)
4.	Awareness that PCOD occurs due to hormonal disorders.	50 (14.28)	40 (11.43)	260 (74.29)	350 (100)
5.	Awareness regarding the rate of occurrence of PCOD in India.	31 (8.85)	68 (19.43)	251 (71.72)	350 (100)
6.	Awareness regarding the age group mostly affected by PCOD.	46 (13.14)	84 (24)	220 (62.86)	350 (100)
7.	Awareness that the adolescent period is the beginning stage of PCOD.	48 (13.72)	59 (16.85)	243 (69.43)	350 (100)
8.	Awareness that hormonal imbalance is the main cause of PCOD.	59 (16.85)	61 (17.43)	230 (65.72)	350 (100)
9.	Awareness that PCOD is a common problem among young girls.	61 (17.42)	56 (16)	233 (66.58)	350 (100%)
10.	Awareness that irregular menstruation is one of the symptoms of PCOD.	62 (17.71)	37 (10.57)	251 (71.72)	350 (100%)
11.	Awareness that increased insulin levels are associated with PCOD.	20 (5.72)	45 (12.85)	285 (81.43)	350 (100%)

followed by Christians (20.57%) and Muslims (11.42%), whereas only 4.86% belonged to other religious groups. This indicates that Hindu respondents constituted the predominant religious group within the study population. Overall, the socio-demographic profile indicates that the respondents were predominantly unmarried college-going girls aged 19–21 years, belonging mostly to small families with diverse social and religious backgrounds.

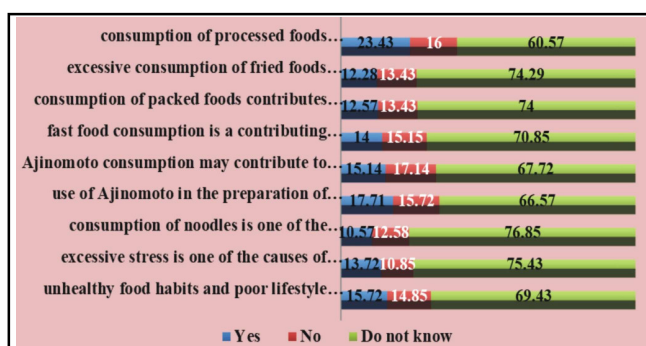
The findings presented in Table 2 reveal limited knowledge and awareness among respondents regarding the general and medical aspects of PCOD. Only 27.14% of respondents reported that they knew the meaning of PCOD, whereas more than half of the respondents (51.43%) indicated that they did not know about it. Awareness regarding the medical meaning of polycystic ovaries as the presence of multiple cysts in the ovaries was found to be very low, as only 13.14% respondents answered positively while 73.14% expressed lack of knowledge. Similarly, awareness that ovarian cysts are one of the common signs of PCOD was reported by only 13.71% respondents, whereas 71.15% did not know about this condition. Knowledge regarding hormonal disorders as a cause of PCOD was also inadequate, with only 14.28% respondents being aware and 74.29% lacking knowledge. Awareness regarding the prevalence of PCOD in India was particularly poor, as merely 8.85% respondents reported awareness while 71.72% did not know. Regarding the age group mostly affected by PCOD, only 13.14% respondents were aware, whereas 62.86% lacked knowledge. Similarly, awareness that adolescence

is considered the beginning stage of PCOD was observed among only 13.72% respondents, while 69.43% reported that they did not know. Awareness that hormonal imbalance is the major cause of PCOD was identified among 16.85% respondents, whereas 65.72% lacked awareness. Further, only 17.42% respondents were aware that PCOD is a common problem among young girls, while 66.58% expressed lack of knowledge. Awareness regarding irregular menstruation as one of the symptoms of PCOD was reported by 17.71% respondents, whereas 71.72% did not know. Knowledge regarding the association between increased insulin levels and PCOD was found to be the lowest, as only 5.72% respondents answered positively while a majority of respondents (81.43%) lacked awareness. Overall, the findings indicate that the respondents possess inadequate knowledge and limited medical awareness regarding PCOD, its causes, symptoms, prevalence, and associated metabolic conditions.

Table 3 and Fig. 1 presents the awareness of respondents regarding lifestyle and dietary factors influencing PCOD. The findings indicate that awareness levels among respondents were generally low, while a large proportion of respondents selected “Do not know” for most statements. The data reveal that only 15.72% respondents were aware that unhealthy food habits and poor lifestyle practices contribute to PCOD, whereas 69.43% respondents lacked knowledge regarding this relationship. Awareness that excessive stress is one of the causes of PCOD was reported by only 13.72%

Table 3 : Distribution of the respondents on the basis of awareness on lifestyle and dietary factors influencing PCOD

Sr. No.	Statements	Yes (N, %)	No (N, %)	Do not know (N, %)	Total (N, %)
1.	Awareness that unhealthy food habits and poor lifestyle practices contribute to PCOD.	55 (15.72)	52 (14.85)	243 (69.43)	350 (100)
2.	Awareness that excessive stress is one of the causes of PCOD.	48 (13.72)	38 (10.85)	264 (75.43)	350 (100)
3.	Awareness that consumption of noodles is one of the contributing factors of PCOD.	37 (10.57)	44 (12.58)	269 (76.85)	350 (100)
4.	Awareness regarding the use of Ajinomoto in the preparation of noodles.	62 (17.71)	55 (15.72)	233 (66.57)	350 (100)
5.	Awareness that Ajinomoto consumption may contribute to noodle addiction.	53 (15.14)	60 (17.14)	237 (67.72)	350 (100)
6.	Awareness that fast food consumption is a contributing factor for PCOD.	49 (14)	53 (15.15)	248 (70.85)	350 (100)
7.	Awareness that consumption of packed foods contributes to PCOD.	44 (12.57)	47 (13.43)	259 (74)	350 (100)
8.	Awareness that excessive consumption of fried foods contributes to PCOD.	43 (12.28)	47 (13.43)	260 (74.29)	350 (100)
9.	Awareness that consumption of processed foods contributes to obesity.	82 (23.43)	56 (16)	212 (60.57)	350 (100)

**Fig. 1 : Respondent on the basis of awareness of life style and dietary factors influencing PCOD**

respondents, while 75.43% expressed uncertainty. Similarly, awareness regarding noodles as a contributing dietary factor of PCOD was observed among merely 10.57% respondents, whereas 76.85% did not know about this association. Regarding awareness of Ajinomoto used in noodle preparation, only 17.71% respondents answered positively while 66.57% lacked awareness. Further, 15.14% respondents were aware that Ajinomoto consumption may contribute to food dependency or addiction, whereas 67.72% reported lack of knowledge. Awareness that fast food consumption contributes to PCOD was found among only 14% respondents, while 70.85% respondents did not know. Similarly, awareness regarding packed food consumption as a contributing factor for PCOD was identified among only 12.57% respondents, whereas 74% lacked knowledge. Awareness that excessive fried food intake contributes

to PCOD was reported by merely 12.28% respondents while 74.29% respondents expressed uncertainty. Comparatively higher awareness was observed regarding processed food consumption and obesity, where 23.43% respondents answered positively. However, a majority of respondents (60.57%) still reported that they did not know about this association. Overall, the findings demonstrate insufficient awareness among respondents regarding lifestyle and dietary determinants of PCOD. The predominance of “Do not know” responses reflects substantial gaps in knowledge related to unhealthy dietary habits, stress, processed foods, and fast-food consumption as contributing risk factors of PCOD [Table 3 (I)].

Table 3(I): Conceptual Framework for Risk Classification

Response Category	Interpretation	Risk Level
Yes	Aware of risk factor	Low Risk
Do not know	Lack of knowledge	Moderate Risk
No	Denial / Misconception	High Risk

The awareness of respondents regarding lifestyle and dietary factors influencing PCOD was analysed through a behavioral risk classification framework to understand the level of vulnerability associated with different awareness levels. For this purpose, responses from nine awareness statements were analysed for all 350 respondents, resulting in a total of 3150 responses. To interpret these responses systematically, a logically structured self-designed scale was developed. In this scale, “Yes” responses were assigned a score of 3 to

indicate adequate awareness, “Do not know” responses were given a score of 2 representing uncertainty or lack of knowledge, and “No” responses were assigned a score of 1 indicating denial or misconception regarding the risk factors.

Based on this scoring pattern, the responses were categorized into different behavioural risk levels. Respondents who acknowledged the role of lifestyle and dietary factors in PCOD were classified under the low-risk category, as awareness is generally associated with better preventive health behavior. Responses marked as “Do not know” were placed in the moderate-risk category, reflecting informational gaps and insufficient understanding about the relationship between lifestyle practices and PCOD. However, responses marked as “No” were considered high risk, as denial indicates misconceptions rather than simple lack of information. Such denial may prevent individuals from recognizing the impact of unhealthy dietary habits, sedentary lifestyle, and stress on reproductive health. Therefore, this behavioral classification provides a meaningful framework for understanding the varying levels of vulnerability among respondents and highlights the importance of targeted health education to improve awareness about lifestyle-related determinants of PCOD.

Table 3(II) and Fig. 2 presents the overall risk classification of respondents based on their awareness regarding lifestyle and dietary factors influencing PCOD. The data show that the majority of responses, 70%, fall under the moderate risk category, indicating that most respondents selected “Do not know.” This suggests a considerable lack of clear knowledge among college-going girls about the influence of lifestyle and dietary habits on PCOD.

Further, 15.34% of responses were categorized as low risk, where respondents correctly acknowledged that lifestyle and dietary factors play a role in PCOD. This indicates that only a small proportion of respondents possess adequate awareness regarding the relationship between lifestyle behavior and PCOD.

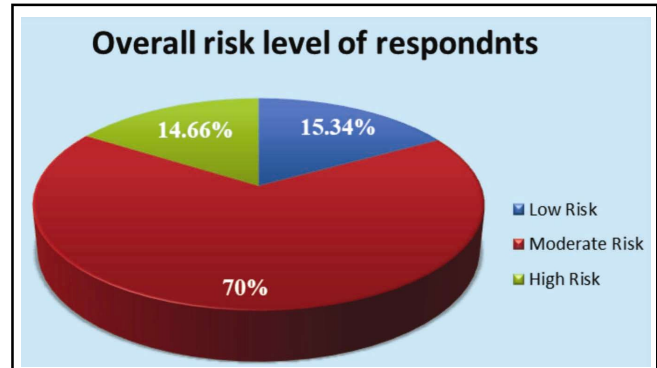


Fig. 2 : Flowchart of extract preparation of *Clitoria ternatea* flower

In contrast, 14.66% of responses fall under the high-risk category, where respondents denied the role of lifestyle and dietary factors. This reflects misconceptions or incorrect beliefs, which may lead to poor preventive practices and unhealthy behavioral patterns related to PCOD.

According to Table 4 presents the respondents' awareness regarding personal and family history related to PCOD. The findings indicate limited awareness and considerable uncertainty regarding hereditary factors, symptoms, and clinical manifestations associated with PCOD. The data show that only 8.57% respondents reported a family history of PCOD, whereas 62.86% indicated that they did not know. Similarly, only 5.43% respondents reported a family history of infertility, while 64.29% lacked knowledge regarding this aspect. Awareness that PCOD is one of the major causes of infertility was reported by only 11.42% respondents, whereas 70.86% expressed lack of knowledge. Similarly, only 15.71% respondents reported awareness regarding symptoms of PCOD, while 67.14% selected “Do not know”. Regarding physical symptoms, 16.85% respondents reported the presence of excessive hair growth or male-pattern hair changes on the body, whereas 28.29% respondents were uncertain about it. Similarly, 21.71% respondents reported pubic hair growth on the

Table 3(II) : Summary of Overall Risk Classification of Respondents Based on Awareness of Lifestyle and Dietary Factors Influencing PCOD

(N = 350, Total Responses = 3150)				
Sr. No	Risk Level	Interpretation	Total Frequency	Percentage (%)
1.	Low Risk	Aware of risk factors (Yes)	483	15.34
2.	Moderate Risk	Lack of knowledge (Do not know)	2205	70
3.	High Risk	Denial / Misconception (No)	462	14.66
	Total		3150	100

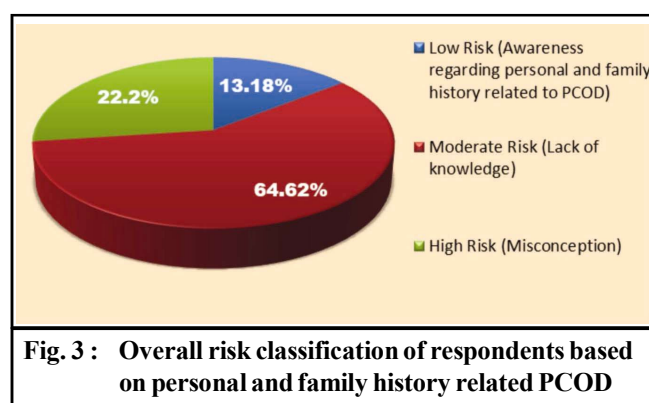
Table 4 : Personal and Family History related to PCOD

Sr. No.	Statements	Yes (N, %)	No (N, %)	Do not know (N, %)	Total (N, %)
1.	Family history of PCOD among the respondents.	30 (8.57)	100 (28.57)	220 (62.86)	350 (100)
2.	Family history of infertility among the respondents.	19 (5.43)	106 (30.28)	225 (64.29)	350 (100)
3.	Awareness that PCOD is one of the main causes of infertility.	40 (11.42)	62 (17.72)	248 (70.86)	350 (100)
4.	Awareness regarding the symptoms of PCOD.	55 (15.71)	60 (17.14)	235 (67.14)	350 (100)
5.	Presence of hair changes or excessive hair growth (male pattern) on the body	59 (16.85)	192 (54.86)	99 (28.29)	350 (100)
6.	Presence of pubic hair growth on the abdomen and around the navel	76 (21.71)	96 (27.43)	178 (50.86)	350 (100)
7.	Awareness that abnormal growth of facial hair is associated with PCOD	26 (7.42)	90 (25.72)	234 (66.86)	350 (100)
8.	Awareness that excessive pimples are one of the symptoms of PCOD	66 (18.85)	42 (12)	242 (69.15)	350 (100)
9.	Awareness that overweight or obesity contributes to PCOD.	55 (15.71)	56 (16)	239 (68.29)	350 (100)
10.	Awareness that PCOD is one of the causes of weight gain.	52 (14.85)	41 (11.72)	257 (73.43)	350 (100)

abdomen and around the navel, while 50.86% lacked awareness regarding this symptom. Awareness that abnormal facial hair growth is associated with PCOD was found to be particularly low, as only 7.42% respondents answered positively whereas 66.86% did not know. Further, 18.85% respondents recognized excessive pimples as one of the symptoms of PCOD, while 69.15% lacked awareness. Similarly, only 15.71% respondents were aware that overweight or obesity contributes to PCOD, whereas 68.29% expressed uncertainty. Awareness that PCOD may lead to weight gain was also limited, as only 14.85% respondents answered positively while 73.43% lacked knowledge. Overall, the findings indicate inadequate awareness among respondents regarding hereditary aspects, clinical symptoms, hormonal manifestations, and metabolic consequences associated with PCOD.

Table 4 (I) and Fig. 3 presents the overall risk classification of respondents based on their personal and family history related to PCOD. The analysis shows that out of the total 3500 responses, only 461 responses (13.18%) reflected correct awareness (Yes) regarding personal and familial aspects of PCOD. In contrast, 2262 responses (64.62%) were categorized under moderate risk, indicating that a majority of the respondents reported

“Do not know”, which reflects a considerable lack of knowledge about PCOD-related hereditary factors and symptoms. Furthermore, 777 responses (22.2%) fell under the high-risk category, where respondents denied or held misconceptions regarding PCOD-related personal and family history. These findings indicate that the overall awareness regarding hereditary risk, symptoms, and personal indicators of PCOD among the respondents is relatively low, with a large proportion of students lacking adequate knowledge. Limited awareness about the association of PCOD with infertility, obesity, and hormonal symptoms such as excessive hair growth or acne may

**Table 4(I) : Summary of Overall Risk Classification of Respondents Based on Personal and Family History Related to PCOD (N = 350, Total Responses = 3500)**

Sr. No	Risk Level	Interpretation	Total Frequency	Percentage (%)
1.	Low Risk	Awareness regarding personal and family history related to PCOD (Yes)	461	13.18
2.	Moderate Risk	Lack of knowledge (Do not know)	2262	64.62
3.	High Risk	Denial / Misconception (No)	777	22.2
.	Total		3500	100

Table 5 : Category wise Knowledge and Awareness on PCOD of the respondents				
Category	Frequency	%	Mean	SD
Low	63	18.0	55.622	9.670
Medium	276	78.80	87.786	8.156
High	11	3.20	99.500	1.069
Total	350	100	82.372	15.194

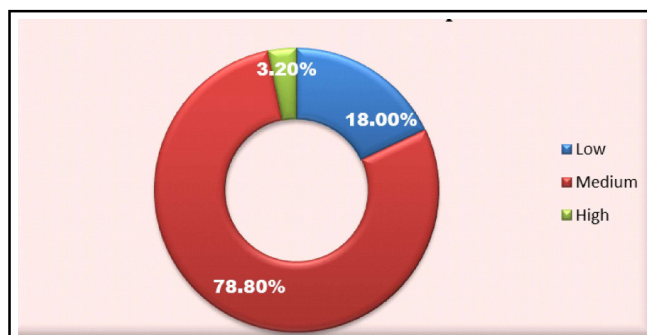


Fig. 4 : Category wise knowledge and awareness on PCOD of the respondents

delay early identification and preventive measures among young women.

Table 5 and Fig. 4 presents the category-wise distribution of knowledge and awareness on PCOD among the respondents. The findings reveal that a majority of the respondents, 276 (78.8%), fall under the medium level of knowledge and awareness, with a mean score of 87.786 (SD = 8.156). This indicates that most college-going girls possess a moderate understanding of PCOD. About 63 respondents (18.0%) belong to the low knowledge category, with a mean score of 55.622 (SD = 9.670), reflecting inadequate awareness among a notable proportion of students. Only 11 respondents (3.2%) fall under the high knowledge category, with a mean score of 99.500 (SD = 1.069), indicating that very few respondents have comprehensive awareness of PCOD. The overall mean score of 82.372 (SD = 15.194) suggests that while general awareness exists, there is still considerable scope for improvement, particularly in moving respondents from moderate to high levels of knowledge.

Conclusion

The present study assessed the knowledge, awareness, and risk factors related to Polycystic Ovarian Disease (PCOD) among college-going girls in Sundargarh, Odisha. The findings revealed that the majority of respondents possessed only a moderate level

of knowledge regarding PCOD, while comprehensive awareness was found among a very limited proportion of participants. Considerable gaps in understanding were observed in relation to the general and medical aspects of PCOD, including its meaning, causes, symptoms, prevalence, and associated metabolic conditions. The study further indicated inadequate awareness regarding lifestyle and dietary determinants influencing PCOD. Most respondents lacked knowledge about the role of unhealthy dietary habits, fast foods, processed foods, stress, and lifestyle behaviors as contributing risk factors. Similarly, awareness related to personal and family history, hereditary predisposition, infertility, obesity, and hormonal manifestations associated with PCOD was found to be limited. The predominance of “Do not know” responses across multiple domains reflects substantial uncertainty and informational gaps among the respondents. The risk classification analysis demonstrated that the majority of respondents belonged to the moderate-risk category, suggesting insufficient awareness and vulnerability toward unfavorable health behaviors and delayed recognition of PCOD-related conditions. Such limited understanding may hinder early identification, timely intervention, and preventive practices among young women. Therefore, the findings emphasize the urgent need for comprehensive health education programmes, awareness campaigns, reproductive health counseling, and institution-based interventions among college-going girls. Educational institutions and healthcare professionals should collaborate to improve knowledge regarding symptoms, risk factors, preventive measures, and healthy lifestyle practices associated with PCOD. Increasing awareness at an early age may facilitate timely diagnosis, encourage positive health-seeking behavior, and ultimately contribute to improved reproductive and overall health outcomes among young women. This study may also serve as a baseline reference for future research and policy development related to reproductive health and PCOD awareness among adolescent and young women in Odisha.

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