

**ASSESSMENT OF POLYCYSTIC OVARIAN SYNDROME KNOWLEDGE AMONG UNMARRIED WOMEN SEEKING CARE AT SECONDARY HEALTHCARE FACILITIES**Nargis Kamal<sup>1</sup>**Correspondence**

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**ABSTRACT  
OBJECTIVES**

*This study aims to assess the level of awareness regarding polycystic ovarian syndrome (PCOS) among young, unmarried females attending secondary healthcare institutions.*

**METHODOLOGY**

*A cross-sectional study was conducted at a rural hospital between January 2022 and December 2022. Ethical clearance was obtained prior to data collection. A pre-designed proforma was employed to gather information from participants visiting the Out-patient Department (OPD). Data collection utilized a non-probability sampling technique, and subsequent analysis was performed using SPSS version 24.*

**RESULTS**

*The study's findings pertaining to knowledge levels, participants with no formal education constituted 24.03%, while 6.20% had completed high school and 3.87% held master's degrees. Information on PCOS was relayed by sisters/cousins (13.17%) and mothers (20.25%), and 32.55% expressed hesitancy in seeking information due to shyness. Menstrual irregularities included polymenorrhagia (24%), oligomenorrhea (33%), amenorrhea (15%), and irregular periods (28%). Clinical deviations encompassed menstrual abnormalities (37%), abnormal male hair type distribution (12%), infertility (16%), mood disorder (7%), dyslipidemia (17%), and hypertension (11%).*

**CONCLUSION**

*The study underscores the need for well-structured educational initiatives to enhance comprehensive awareness of PCOS symptoms, facilitate early diagnosis and treatment, and ultimately improve overall well-being.*

**KEYWORDS:** Polycystic Ovarian Syndrome, Adolescent Females, Unmarried Women, Health

**INTRODUCTION**

The human body goes through a considerable period of physical, psychological, and functional growth during adolescence, which is a time when you're transitioning from being a carefree child to a responsible adult. The human mind reaches its highest level of physical and sexual maturity and its most advanced level of reasoning during this time.<sup>1</sup> When a child enters puberty, numerous morphological and anatomical changes are intended to result in physiological changes. To reduce the prevalence of polycystic ovarian syndrome during this phase, it is necessary to enforce constant awareness of lifestyle decisions.<sup>2</sup> Female sex hormones are out of balance in women with polycystic ovarian syndrome. This could result in irregular menstrual cycles, ovarian cysts, inability to conceive children, and other health issues.<sup>3</sup> Teenagers are now more likely to develop this illness due to the proliferation of fast food, sedentary lifestyles, and

increasing peer interaction. Pakistan has an infertility incidence of 21.9%, and PCOS is responsible for 38.5% of infertility. Additionally, research on Pakistani women indicates a significant frequency of PCOS. According to a study of PCOS-afflicted women who visited clinics in three cities in Pakistan, most suffered from obesity, hirsutism, high blood sugar, irregular menstrual periods, and acne. The survey also revealed that the respondents had a poor quality of life and were depressed. Another study found that sexual dysfunction was a predictor of depression in women with PCOS.<sup>4</sup> After participating in a social media campaign to raise awareness, participants in a study in Saudi Arabia demonstrated increased knowledge.<sup>5</sup> Although PCOS cannot be prevented, adhering to treatment recommendations, and altering one's lifestyle once the condition has been identified is crucial.<sup>6</sup> Since bewilderment and a sedentary lifestyle were identified as the primary variables contributing to the syndrome in the study, adolescent girls must be appropriately

informed about PCOS to prevent it at the earliest chance.<sup>7,8</sup> This study will assess the state of knowledge on PCOS prevention. The fact that PCOS is a common endocrinological illness in young adults and that its long-term implications could include infertility and trouble conceiving led the researcher to believe that it was crucial to investigate and create the most recent knowledge relevant to the syndrome. Intensifying prevention of modifiable risk factors for PCOS might be possible.

## METHODOLOGY

A cross-sectional study was carried out at Landikotal Hospital's Gynaecology outdoor patient department. The period for data collection was from January 2022 to December 2022. Participants were chosen for the study using a non-probability consecutive sampling method based on their availability and desire to participate. A total of 129 patients were involved in the trial. A pre-made proforma was used to collect the data, and it probably featured fields and questions pertinent to the study. The IBM SPSS software, version 24.0, was used to analyze the data gathered.

## RESULTS

Among the study's total participants, 19% were aged below 20, while the majority, constituting 50%, fell within the 20-30 age bracket. A notable percentage of 31% comprised participants aged between 31 and 35 years.

**Table 1: Knowledge about PCOS**

Variables	Frequencies	%ages
Uneducated	31	24.03%
High school	08	06.20%
Master	05	03.87%
Told by sister/cousins	17	13.17%
Told by mother	26	20.25%
Feel shy in asking	42	32.55%

**Table 2: Menstrual Irruptions**

Pattern	Frequency	%ages
Polymenorrhea	32	24%
Oligomenorrhea	43	33%
Amenorrhea	19	15%
Irregular Periods	35	28%

**Table 3: Clinical Deviations**

Clinical Presentation	Yes	No
Menstrual Abnormalities	48(37.2)	81(62.8)
Abnormal Male Hair Type Distribution	16(12.4)	113(87.6)
Infertility	108(83.7)	21(16.3)
Mood Disorder	08(06.2)	121(93.8)
Dyslipidemia	22(17.1)	107(82.9)
Hypertension	14(10.9)	115(89.1)

## DISCUSSION

Women of reproductive age frequently experience a

chronic diverse endocrine disease called PCOS. Several dermatologic, oncologic, reproductive, and psychiatric conditions are more common in people with PCOS. Paramedical personnel and students should be educated on the risk factors, symptoms and consequences associated with PCOS to raise awareness in the community.<sup>9</sup> Fifty per cent of the participants were between the ages of 20 and 30. 19% of participants were under 20, while 31% were between 31 and 35. Participants in the study appear to be of various ages, with a sizable proportion in the 20-30 age range. Most participants (80%) or sisters/cousins (13.17%) claimed to have learned about PCOS from their mothers. A sizable portion of participants (32.55%) admitted feeling reluctant to inquire about PCOS. The sources of information about PCOS are varied, with family sources predominating. A well-known trading hub between Pakistan and Afghanistan is Landikotal. Whereas the WHO states that the health facility is outdated, a well-equipped gynea-obs and nutritional unit were recently opened on Friday, 27, 2023, with WHO cooperation to support the health facility in that area for nine million rupees.<sup>10</sup> The highest level of patients was seen in the age group 20-30, 65(50%), which shows the risk in the most important reproductive age. Oligomenorrhea (33%), followed by irregular periods (28%), was the most prevalent menstrual pattern described. 24% and 15% of subjects reported having polymenorrhea and amenorrhea, respectively. The study participants appear to have a high prevalence of menstrual abnormalities. Menstrual abnormalities (37% of all reported clinical presentations) were the most common. Infertility (16%), dyslipidemia (17%), hypertension (11%), irregular male hair type distribution (12%), and mood disorders (7%), among others, were also noted as clinical abnormalities. The study highlights the variety of clinical abnormalities linked to PCOS, underscoring its complex nature. According to the survey of households and demographic (2017-18), only 1.5% have ever used the internet, while 67% of men and 85% of women have no media access. According to our study's findings, the demographics and health survey's statistics show that only 49% of births are attended by trained medical personnel, less than 30% of children have received even the most basic immunizations, and 17% of women and 76% of men, respectively, have the highest rates of literacy.<sup>11</sup> The majority belongs to the middle and lower class, which claims PCOS as their main problem. The education ratio was seen less as 31(24.03%) were uneducated, which presented at opd, while 8(6.20%) went to high school only. Parental educated and family gathering plays an important role in home education. Most women feel shy in asking due to the social and cultural differences among the homes and families. In Coimbatore, a study by Begum and

Sheeba found no correlation between certain demographic factors and understanding of PCOS.<sup>12</sup> Early detection and rapid treatment would improve young girls quality of life. All racial and age groups need to be made more aware of PCOS and its health hazards. The general public has to be made aware of PCOS. PCOS is relatively rare, but taking proper precautions to prevent the disease is advised because it can result in numerous significant problems. The course materials that encourage awareness of diseases and lifestyle modifications must include information on adolescent counselling. A proper diagnosis obtained when the patient is younger may be key to averting many long-term problems connected to these diseases. It is abundantly clear that adolescent girls are severely under-informed about PCOS, and as a result, effective counselling and preventive measures could be implemented to reduce the morbidity related to this condition. These include technology health promotion, follow-up on healthy lifestyles, and booklets on PCOS. It can be difficult to treat PCOS in teenagers. Its unclear etiology, the ongoing debate over how to diagnose PCOS in adolescents, or even the relatively small number of research that concentrates especially on PCOS in adolescents do not make the process any easier.<sup>13</sup> More work needs to be done to offer the adolescent population with this type of safe and efficient treatment. According to a study by Tahir and colleagues, about 75 per cent of participants from medical colleges were aware of the illness.<sup>14</sup> It is a good thing because recognizing an issue is the first step in solving it. Therefore, addressing the knowledge crisis calls for coordinated measures. Taking Saudi colleges as an example, which has raised awareness of women's health issues, including breast cancer.<sup>15</sup> In a study by Anjum and colleagues, oligomenorrhea and hirsutism were shown to be the most prevalent symptoms among women with PCOS in clinical settings in Pakistan. Additionally, Anjum et al. showed that over 80% of PCOS-afflicted women were obese.<sup>16</sup> Studies suggest that as one's education level rises, they become more conscious of their surroundings and other people's differences, which causes them to become more critical of themselves and less satisfied with their lives. Eventually, this disturbs their quality of life. Another study, however, produced contradictory findings, claiming that the lesser one's educational attainment, the worse one's quality of life.<sup>17,18</sup>

## LIMITATIONS

It is important to acknowledge certain limitations in this study. The utilization of a non-probability consecutive sampling method might introduce selection bias, potentially affecting the generalizability of the findings.

Additionally, the reliance on self-reported data could introduce recall bias and may not fully reflect participants actual experiences. Lastly, the single-year data collection period might not capture long-term trends or variations in the studied parameters.

## CONCLUSIONS

The study underscores the need for targeted educational efforts to enhance awareness and understanding of PCOS among young, unmarried women. The prevalence of menstrual irregularities and clinical deviations highlighted in the findings necessitates early detection and intervention strategies. By addressing knowledge gaps and promoting proactive healthcare measures, the study advocates for improved overall well-being in this specific demographic.

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## CONTRIBUTORS

1. **Nargis Kamal** - *Concept & Design; Data Acquisition; Data Analysis/Interpretation; Drafting Manuscript; Critical Revision; Supervision; Final Approval*



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