

# Awareness and Management of Polycystic Ovarian Syndrome (PCOS) among Female Undergraduates of Nnamdi Azikiwe University, Awka, Anambra State

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DOI: <https://doi.org/10.51244/IJRSI.2025.121500090P>

Received: 22 May 2025; Accepted: 03 June 2025; Published: 08 July 2025

## ABSTRACT

Polycystic ovarian syndrome (PCOS) is a significant public health problem and is one of the most common hormonal disturbances affecting women of reproductive age. Women with PCOS are at risk for infertility, endometrial cancer, metabolic disorders, and cardiovascular disease. Awareness of the signs and symptoms of PCOS can be effective in diagnosing early stage of PCOS and thereby pave way for its management and promoting quality of life. This study assessed the awareness of PCOS and its management among female undergraduates of Nnamdi Azikiwe University, Awka, Anambra State. A descriptive survey was used and population of the study comprised of N= 25,000 undergraduate female students from the 14 faculties of Nnamdi Azikiwe University, Awka. The sample size for this study was n = 252 students and a multi-stage sampling approach was used. In the first stage, the researchers used the simple random sampling technique to select seven faculties from Nnamdi Azikiwe University. In the second stage, purposive sampling was employed to select students based on specific criteria determined by the researcher. In the third stage, the simple random sampling technique was used to pick 36 students from each of the seven selected faculties, resulting in a total sample size of n = 252 students. The findings revealed a high level of awareness of basic PCOS symptoms; however, participants demonstrated a significant lack of understanding regarding more complex issues, including treatment options and the long-term health effects of the condition. The result also indicated that undergraduates' awareness of PCOS did have significant influence on their mother's level of education since the F value of 4.79 is greater than the p-value of 0.01 F-cal, P( 4.793, P = 0.009). Based on these results, the study recommends implementing targeted educational campaigns to enhance PCOS awareness, strengthening healthcare services on campus, and developing targeting support programs for students managing PCOS. This conclusion of the study implies the critical need for improved social, behavior change, educational interventions and healthcare resources that are of public health relevance towards the empowerment of women of reproductive age or female students for effectively managing PCOS and promoting their overall reproductive health.

**Keywords:** Awareness, Management, Polycystic Ovarian Syndrome (PCOS)

## BACKGROUND OF THE STUDY

Polycystic ovarian syndrome (PCOS) is a significant public health problem and is one of the most common hormonal disturbances affecting women of reproductive age. The condition affects an estimated 8–13% of women of reproductive age, and up to 70% of cases are undiagnosed, the prevalence of PCOS is higher among some ethnicities and these groups often experience more complications, in particular related to metabolic problems [1]. It has emerged as a new epidemic in the last few decades. The prevalence of Polycystic Ovarian Syndrome (PCOS) is an endocrine disorder affecting women of reproductive age, characterized by symptoms such as irregular menstrual cycles, hyperandrogenism (excessive levels of androgens (male hormones) in the female body), and polycystic ovaries.

Research conducted in Nigeria found that knowledge about PCOS among reproductive-age women was generally poor, emphasizing the importance of education and awareness regarding risk factors, symptoms,

complications, and management strategies. [2]. [3] observed that no population-based study estimated PCOS's prevalence, clinical, and biochemical characteristics in Nigeria. In a study of infertility across multiple countries, they reported that the World Health Organization (WHO) had previously demonstrated that the African region has a lower occurrence of infertility than more developed areas of the world. There is emerging evidence that ethnicity is closely associated with PCOS due to different genetic and environmental propensity to metabolic and hormonal aberrations. However, two studies conducted in Nigeria indicated that the occurrence of PCOS was 18.1% and 12.2% respectively [1]. These studies, though, used the Rotterdam criteria. [4] submitted that Polycystic ovarian syndrome (PCOS) is a condition in which a woman has an imbalance of female sex hormones. This may lead to changes in the menstrual cycle, cysts in the ovary, failure to conceive, and other health problems. They pointed out that women with PCOS often experience irregular menstrual cycles and difficulties in conceiving, affecting their reproductive health, and a leading cause of ovulatory infertility globally.

In Nigeria, particularly among the female undergraduate population at Nnamdi Azikiwe University, knowledge and understanding of PCOS are limited, contributing to delayed diagnosis and suboptimal management. [5] opined that Polycystic Ovarian Syndrome (PCOS) presents with various symptoms among Nigerian women. The most common symptoms include menstrual irregularity, obesity, hirsutism, acne, alopecia, and acanthosis nigricans. PCOS clients in Nigeria exhibit significantly increased levels of reproductive hormones such as estradiol, luteinizing hormone, testosterone, and prolactin, along with insulin resistance and higher BMI compared to control subjects. Furthermore, the prevalence of hyperandrogenemia, hyperinsulinemia, and hyperleptinemia is higher in Nigerian women with PCOS, indicating a complex interplay of endocrine disorders associated with the syndrome. According to [6], Polycystic ovarian syndrome (PCOS) is a common chronic disorder affecting women of childbearing age. Though it has no known cause, for now, it has been linked with having genetic properties in most women with it. The effects of its symptoms on the day-to-day lives of women are still poorly understood, especially among Nigerian women and black women generally. This lack of understanding in turn affects the care of women with PCOS, which can result in a poor quality of life that could be avoided of Nigerian women and to inform policy and practice changes targeted towards improving the quality of life of Nigerian women with PCOS.

## **Justification**

This study has public health relevance for female students by providing clarity towards a better understanding of PCOS symptoms, potential impacts on health and well-being and access to information and educational communication materials and collaborative support leverage from networks that can help them manage PCOS effectively.

Health professionals as well as mothers will benefit from the study focused on the identification of PCOS symptoms, diagnosis, and treatment strategies practiced among young women. The public health relevant experiences and needs of female undergraduates with PCOS would improve access and scalability of providing a guided practice and client care for human resources for health.

## **Objective**

The main purpose of this study was to assess the Awareness and Management of Polycystic ovarian syndrome (PCOS) among female undergraduates of Nnamdi Azikiwe University, Awka. Specifically, the study seeks to:

1. Find out the level of awareness of PCOS among female undergraduates of Nnamdi Azikiwe University, Awka,
2. Find out the level of awareness of PCOS among female undergraduates of Nnamdi Azikiwe University, Awka based on educational level of their mothers.
3. Examine the knowledge level of PCOS management strategies and their effectiveness among female undergraduates of Nnamdi Azikiwe University, Awka.

## Research Questions

The following research questions guided the study:

1. What is the level of awareness of PCOS among female undergraduates of Nnamdi Azikiwe University, Awka?
2. What is the level of awareness of PCOS among female undergraduates of Nnamdi Azikiwe University, Awka based on educational level of their mothers?
3. What is the knowledge level of PCOS management strategies and their effectiveness among female undergraduates of Nnamdi Azikiwe University, Awka?

## Hypothesis

H<sub>1</sub>:  $r=0$  The distribution of the association between undergraduates' awareness of PCOS and their mother's level of education is equal to zero.

H<sub>2</sub>:  $r \neq 0$  The distribution of the association between undergraduates' awareness of PCOS and their mother's level of education is not equal to zero.

H<sub>3</sub>:  $r=0$  The distribution of the association between undergraduates' awareness of PCOS and their knowledge level of its management is zero.

H<sub>4</sub>:  $r \neq 0$  The distribution of the association between undergraduates' awareness of PCOS and their mother's level of its management is not zero.

## Study Area

Nnamdi Azikiwe University, Awka, also called UNIZIK or NAU. UNIZIK is a federal university in Nigeria. It consists of four campuses in Anambra State. Its main campus is in Awka (the capital of Anambra State), while its other campus is in Nnewi. There are also other campuses of Nnamdi Azikiwe University. These include Agulu in Aniocha local government area and Ifite-Ogwuari in the Ayamelum local government area in Anambra State. It is one of the prestigious institutions in Nigeria, ranking No. 4th in Nigeria and No. 31 in sub-Saharan Africa. This study focuses on the main campus in the local government area of Awka-south in Awka capital, Anambra State. The Awka campus is the administrative headquarters of the University. Awka is the capital of Anambra State and the University is located along the Enugu – Onitsha Express Road, 62.0 kilometers from Enugu, the capital of Enugu State; 48 kilometers from Onitsha, a commercial and industrial hub in the State, which has the largest market in West Africa.

The Campus is located about 2.6 kilometers from the Awka city center. Nnamdi Azikiwe was chosen for this study because the university hosts a large number of female undergraduates who are in their prime reproductive years. This makes it an ideal setting for studying PCOS, a condition that predominantly affects women of reproductive age. Understanding how this population manages PCOS can have significant implications for improving reproductive health education and services at the university and beyond.

## LITERATURE REVIEW

Several studies have been conducted in recent years to examine the prevalence of PCOS and its impact on women's health. A survey conducted among women with infertility in Enugu, South East Nigeria, found that 18.1% of the women had PCOS. There is a lack of awareness about PCOS among female undergraduates. [7] pointed out that lifestyle management is a key aspect of treating polycystic ovary syndrome (PCOS) due to its cost-effectiveness and positive effects on weight, hormonal balance, and quality of life. Effective management of PCOS involves a combination of healthy eating habits, regular physical activity, and weight management strategies to improve symptoms and reduce the risk of complications. [7] further specified that women with PCOS are encouraged to follow a balanced diet rich in fruits, vegetables, whole grains, and lean proteins while

limiting processed foods, sugars, and saturated fats to help regulate insulin levels and manage weight. Regular exercise, including aerobic activities and strength training, are recommended to enhance insulin sensitivity, promote weight loss, and improve overall health in PCOS clients.

This agrees with [8] explanation that weight management is essential in PCOS, as excess weight or obesity can lead to elevated androgen production rates, contributing to the symptoms of the syndrome. [9] conducted a cross-sectional study among female undergraduate students in Pakistan using a survey to assess their understanding of PCOS. The average PCOS knowledge score was  $11.58 \pm$ , highlighting significant gaps in knowledge. The study highlighted inadequate disease knowledge among undergraduate students regarding PCOS in Pakistan. [10] conducted a cross-sectional study in China to assess health literacy and its relationship with health behaviours in clients with PCOS. The results indicated that 55.9% of the clients needed more health literacy. Furthermore, 40.6% of the clients exhibited poor health behaviours, and 31.8% exhibited moderate health behaviours, indicating a need for improvement. Health literacy was positively correlated with health behaviours ( $r=0.473$ ,  $p<0.05$ ), suggesting that promoting health literacy could benefit the management of PCOS.

Despite its high prevalence, PCOS remains underdiagnosed and undertreated in many settings, particularly in developing countries where knowledge, awareness and access to health care are limited [11]. Additionally, a study highlights that educational interventions targeted at increasing awareness and understanding of PCOS among young women can significantly improve early diagnosis and management [2]. According to Kaundal *et al.*, Lifestyle modifications are often the first line of treatment for PCOS, particularly for overweight or obese women, and weight loss through diet and exercise can significantly improve symptoms of PCOS. Apart from Lifestyle modifications, [12] emphasized the benefits of counseling and cognitive-behavioural therapy (CBT) in improving mental health outcomes and quality of life for women with PCOS. Additionally, [13] found that women with PCOS are at a higher risk for mood disorders and that interventions targeting mental health can substantially alleviate these issues. [14] noted that the prevalence of depression and anxiety among women with PCOS was significantly higher, necessitating the integration of psychological support into routine PCOS management. The positive outcomes of university-based mental health interventions, where students reported reduced anxiety and depressive symptoms following structured support programs. Furthermore, [15] emphasized that mental health professionals within university settings are uniquely positioned to offer tailored interventions that consider the specific stressors and lifestyle factors affecting young women.

Technology has significantly enhanced the health education of individuals with Polycystic Ovarian Syndrome (PCOS), providing innovative solutions that improve knowledge, self-management, and overall well-being. [16] demonstrated the effectiveness of mobile health applications in improving health education among women with PCOS. These apps often feature interactive elements such as symptom diaries, meal planners, and educational content, empowering users to actively participate in their care. By offering tailored health information and reminders, these apps facilitate better symptom tracking and lifestyle modifications, which are critical for managing PCOS. Wearable technology, including fitness trackers and smartwatches, also plays a crucial role in health education for PCOS. [17] highlighted the potential of these devices in providing continuous monitoring and feedback, which encourage behaviour change and support long-term health goals. Wearable devices offer real-time data on physical activity, sleep patterns, and heart rate, enabling individuals with PCOS to monitor their health comprehensively and make informed lifestyle decisions.

Online communities have become essential platforms for health education and emotional support among women with PCOS. [18] found that these communities help reduce feelings of isolation and provide a safe space for individuals to ask questions, share tips, and connect with others facing similar challenges. Such platforms foster a sense of belonging and empowerment, which can be crucial for mental health and well-being. By analyzing large datasets of clinical and lifestyle factors, AI systems can identify patterns and trends associated with PCOS, enabling personalized recommendations and treatment plans. [19] further elaborated on how AI and predictive modeling could revolutionize PCOS education by providing tailored interventions based on individual client data.

By addressing the management of PCOS, clients can alleviate symptoms such as irregular menses, hirsutism, acne, and mood disorders associated with the syndrome. That is why the researcher has decided to study on the



awareness and management of polycystic ovarian (PCOS) among female undergraduates of Nnamdi Azikiwe University Awka, Anambra State.

Polycystic Ovarian Syndrome (PCOS) has significant implications for female undergraduates, influencing various aspects of their academic, emotional, and social lives. Recognizing these implications is essential for developing supportive environments and resources to help these young women manage their condition effectively while pursuing their education. PCOS can adversely affect academic performance due to symptoms such as fatigue, pain, and cognitive disturbances. The physical discomfort and cognitive difficulties associated with PCOS can lead to increased absenteeism and difficulty concentrating during classes or while studying. Furthermore, [20] found that female students with PCOS are more likely to report challenges in maintaining academic performance due to the need to manage symptoms and frequent medical appointments. [21] further talked about the psychological impact of PCOS is profound, contributing to higher rates of depression, anxiety, and body image concerns among female undergraduates. Thus, the study sought to research the awareness and management of PCOS among female undergraduates at Nnamdi Azikiwe University.

## METHODOLOGY

The study adopted a descriptive survey research design. Descriptive research is widely used in education, nutrition, epidemiology, and the behavioural sciences. Its value is based on the premise that problems can be solved and practices improved through observation, analysis, and description [22]. [23] defined descriptive surveys in research as offering numerous benefits, including providing a comprehensive understanding of prevailing conditions or situations, aiding in the interpretation of data, identifying trends and relationships, and offering practical information for solving local issues. A descriptive survey was used because it provides an accurate account of the characteristics, which sought to assess the awareness and management of polycystic ovarian syndrome among female undergraduates of Nnamdi Azikiwe University, Awka.

The population of this study comprised of 25,000 undergraduate female students from the 14 faculties of Nnamdi Azikiwe University, Awka [Sources unizik.edu.ng.] The sample size for this study was 252 students. A multi-stage sampling approach was used. In the first stage, the researchers used the simple random sampling technique to select seven faculties from Nnamdi Azikiwe University: Education, Social Sciences, Management Sciences, Arts, Law, Environmental Sciences, and Physical Sciences. In the second stage, purposive sampling was employed to select students based on specific criteria determined by the researcher. In the third stage, the simple random sampling technique was used to pick 36 students from each of the seven selected faculties, resulting in a total sample size of 252 students.

### Inclusion Criteria

1. Individuals who are registered undergraduates of Nnamdi Azikiwe University.
2. Individuals who consented to participate in the study.
3. Undergraduates on the main campus.

A well-structured questionnaire developed by the researchers was used to obtain necessary information from the respondents. The questionnaire is titled “Awareness and Management of Polycystic Ovarian Syndrome among Female Undergraduates of Nnamdi Azikiwe University” (AMPCOS) This questionnaire consists of two sections which include; Section A contains the demographic characteristics of the respondents and Sections B includes structured questions where respondents choose answers, on a two-point rating such as Yes (Y) or No (N).

The instrument for data collection was validated by two lecturers from the Department of Health Promotion and Public Health Education and one from measurement and evaluation from the faculty of Education. They were requested to validate the instrument in terms of clarity, relevance, and suitability of the dimensions of the study. Comments and corrections of the experts were effected by the researcher before the production of the final instrument.

For the reliability of the instrument, the Cronbach alpha reliability method was used. The overall result obtained was 0.87 showing that the instrument was reliable.

The study adopted a face-to-face approach in issuing the instrument of data collection to the respondents. With the help of two research assistants, the questionnaires were distributed and collected after they have been duly completed by the respondents. Each statement had a yes/no response. Responses were scored as follows:

- Yes = 1 point
- No = 0 points The total score for this section will be calculated by summing the points for all items.
- Strongly Agree = 4 point, Agree = 3 point, Disagree = 2 point and Strongly Disagree = 1 point

Data from research question 1 and 2 were analyzed using percentage while data from research question 3 were analyzed using Mean and standard deviation. The cut-off point for accepting mean score was put at 2.50, with the decision rule that any weighted mean score from 2.50 and above was taken as agree, while weighted mean scores below 2.50 was taken as disagree or low. For the percentage, any score from 50% and above will be regarded as high, while 49% below will be regarded as low.

## Presentation of Data

Table 1: Percentage analysis of the current level of knowledge about PCOS (Polycystic Ovary Syndrome) among female undergraduates of Nnamdi Azikiwe University, Awka n=252

Awareness of PCOS	n	Aware %	Remark	N	Not Aware %	Remark
1. Are you aware of PCOS before today?	197	78.2	VH	55	21.8	VL
2. Do you know what PCOS stands for?	197	78.2	VH	55	21.8	VL
3. Are you aware of the symptoms associated with PCOS?	142	56.3	VH	110	43.7	L
4. Are you aware of the potential causes of PCOS?	110	43.7	VH	142	56.3	L
5. Are you aware of the long-term health implications of PCOS?	72	28.6	VL	180	71.4	VH

Table 2: Respondents' Mean Responses on the level of awareness of PCOS among female undergraduates of Nnamdi Azikiwe University, Awka based on educational level of their mothers

Respondents' mothers Qualifications	n	Mean	Decision
Below O'level holder	15	1.80	Slightly aware
O'level holder	29	2.24	Somewhat aware
NCE/OND	67	2.74	Moderately aware
Degree holder/HND	32	1.86	Slightly aware
Postgraduate	109	3.12	Extremely aware
Total	252	2.71	Moderately aware

Table 3: Mean ratings on the knowledge level of PCOS management strategies and their effectiveness among female undergraduates of Nnamdi Azikiwe University, Awka. n=252

	Mean	SD	Remark
1. Lifestyle changes like diet and exercise can help manage PCOS.	3.49	.64	Accepted
2. There should be more awareness campaigns about PCOS on campus.	3.49	.64	Rejected
3. There should be healthcare services specifically tailored for PCOS on campus.	3.15	.61	Accepted
4. There should be participation in a support group for individuals with PCOS.	3.00	.78	Accepted
5. The University health services should provide information on PCOS.	3.07	.74	Accepted

Table 4: ANOVA Summary on undergraduates' awareness of PCOS and their mother's level of education.

Variations	Sum of Squares	Df	Mean Square	F	P-value
Between Groups	6.474	2	3.237	4.793	.009
Within Groups	179.655	266	.675	-	-
Total	186.129	268	-	-	-

**Hypothesis 2.** There is no significance difference between undergraduates' awareness of PCOS and their knowledge level of its management.

Table 5: ANOVA Summary on undergraduates' awareness of PCOS and their knowledge level of its management.

Variations	Sum of Squares	Df	Mean Square	F	P-value
Between Groups	17.971	4	4.493	8.198	.000
Within Groups	144.685	264	.548	-	-
Total	162.656	268	-	-	-

## DISCUSSION OF FINDINGS

Analysis in Table 1 shows that the respondents has high percentage of awareness in questions 1, 2, and 3 (78.2%, 78.2%, and 56.3% respectively), showing that female undergraduates of Nnamdi Azikiwe University, Awka were aware of PCOS before the onset of this research work and what the acronym PCOS, stands for. They are also aware of the symptoms associated with PCOS. However, the respondents are not aware of the potential causes of PCOS, not aware of the long-term health implications of PCOS, and do not understand how PCOS symptoms can affect a person's quality of life and mental health and not aware of the relationship between PCOS and insulin resistance (56.3%, 71.4%, 63.1% and 63.5% respectively).

The result in Table 2 shows that the highest mean score is that of the Postgraduates with 3.12, followed by the NCE/OND holders with mean of 2.74. This shows that the female undergraduates of Nnamdi Azikiwe University, Awka whose mothers are Degree/HND holders and NCE/OND holders have above moderate awareness of PCOS. Table 2 further revealed that the female undergraduates of Nnamdi Azikiwe University, Awka whose mothers are O'level, Degree /HND holders and below O'level holders are slightly aware of PCOS. Their mean responses are respectively 2.40, 1.86 and 1.80 respectively.

Analysis in Table 3 shows that the respondents accepted in all the questions asked on the educational and healthcare interventions recommended to improve the knowledge and management of PICOS among female undergraduates of Nnamdi Azikiwe University, Awka (mean =3.49, 3.49, 3.15,3.00 and 3.07 respectively).

The result in Table 4 indicated that undergraduates' awareness of PCOS did have significant influence on their mother's level of education since the F value of 4.79 is greater than the p-value of 0.01 (F-cal = 4.793, P = 0.009). The null hypothesis is thus rejected. This implies that the undergraduates' awareness of PCOS differed accordingly on their mother's level of education.

The result in Table 5 indicated that there is significant difference in the undergraduates' awareness of PCOS and their knowledge level of its management since the F value of 8.20 is greater than the p-value of 0.00 (F-cal. = 8.196, P = 0.000). The null hypothesis is rejected. This implies that the undergraduates' awareness of PCOS differed accordingly at their knowledge level of its management.

The findings of the study are discussed based on the research questions that guided the study;

### The current level of knowledge about PCOS (Polycystic Ovary Syndrome) among female undergraduates of Nnamdi Azikiwe University, Awka

The data presented in Table 1, shows that a majority of female undergraduates at Nnamdi Azikiwe University, Awka, are aware of PCOS and what the acronym stands for. Specifically, 78.2% of the respondents. However,

the table also indicates that 71.4% of respondents lack knowledge about the causes of PCOS and its long-term health implications. Furthermore, the data shows that most respondents are not aware of how PCOS symptoms can affect a person's quality of life and mental health, with 63.1% of respondents lacking awareness of this important aspect. Furthermore, Table 1 shows that a significant number of respondents 63.5% are unaware of the relationship between PCOS and insulin resistance. . On the positive side, the table reveals that more than half of the respondents are aware of the symptoms associated with PCOS, but their understanding of the deeper aspects of the condition is limited. The findings from Table 1, are consistent with Wang et al. (2023), who similarly reveal that although female undergraduates may have a surface-level understanding of PCOS, they lack the comprehensive knowledge needed to make informed decisions about managing the condition.

Furthermore, Wang et al. (2023) identified education, attitude, and knowledge as key factors that influence life management behavior in women with PCOS. The data from Table 1 supports this notion, as it shows that although some respondents were aware of PCOS, they were less informed about critical aspects that would affect their management behaviors, such as the causes and long-term effects. The researcher is of the opinion that addressing these knowledge gaps through targeted educational initiatives is essential for empowering female students to manage PCOS effectively

### **The level of awareness of PCOS among female undergraduates of Nnamdi Azikiwe University, Awka based on educational level of their mothers.**

The result in Table 2 shows that the highest mean score is that of the Postgraduates with 3.12, followed by the NCE/OND holders with mean of 2.74. This shows that the female undergraduates of Nnamdi Azikiwe University, Awka whose mothers are Degree/HND holders and NCE/OND holders have above moderate awareness of PCOS. Table 2 further revealed that the female undergraduates of Nnamdi Azikiwe University, Awka whose mothers are O'level, Degree /HND holders and below O'level holders are slightly aware of PCOS. Their mean responses are respectively 2.40, 1.86 and 1.80 respectively.

### **The knowledge level of PCOS management strategies and their effectiveness among female undergraduates of Nnamdi Azikiwe University, Awka.**

The findings from Table 3 support [9], which confirm that lifestyle changes and weight reduction are vital components of PCOS management. This emphasizes that even a modest weight loss can significantly improve symptoms. Data presented in Table 3 shows that attendance at educational sessions about PCOS is viewed as beneficial for enhancing knowledge, with respondents indicating that such sessions should be encouraged, reflected in a mean score of 3.85. Furthermore, the findings suggest that there is a desire for more awareness campaigns about PCOS on campus, with a mean score of 4.02. Additionally, respondents believe that healthcare services specifically tailored for PCOS are necessary, which indicates a gap in current healthcare offerings at the university, as shown by a mean score of 3.76. Table 3 indicates that respondents believe the university health services should provide comprehensive information on PCOS, with a mean score of 3.91, highlighting the need for better educational resources and support systems. These findings align with those of Radwan et al. (2023), who noted the need for improved educational programs to raise awareness and enhance understanding of the condition. Table 3 further supports the findings of Sharma et al. (2024), who recommend several educational and healthcare interventions to improve knowledge and management of PCOS. The researcher is of the opinion that implementing these recommendations will be crucial in empowering female undergraduates with the knowledge and resources necessary to effectively manage PCOS.

Undergraduates' awareness of PCOS did have significant influence on their mother's level of education since the F value of 4.79 is greater than the p-value of 0.01 F-cal, P (4.793, P = 0.009). This implies that the undergraduates' awareness of PCOS differed accordingly on their mother's level of education. However, there is significant difference in the undergraduates' awareness of PCOS and their knowledge level of its management since the F value of 8.20 is greater than the p-value of 0.00 F-cal., P (8.196, P = 0.000). This implies that the undergraduates' awareness of PCOS differed accordingly at their knowledge level of its management.



## CONCLUSION

The findings from this study highlight significant gaps in knowledge and management of Polycystic Ovary Syndrome (PCOS) among female undergraduates at Nnamdi Azikiwe University, Awka. While there is a high level of understanding in some areas, such as lifestyle changes for managing PCOS, there remains a notable lack of awareness regarding critical management strategies like weight management. These findings are consistent with other studies that have shown similar deficiencies in awareness of advanced PCOS management techniques.

There is also a broader need for structured educational programs, healthcare services tailored to PCOS management, and the involvement of support groups, which were echoed by study participants. These interventions could bridge the knowledge gap and empower young women to better manage their condition. In conclusion, targeted educational interventions and healthcare services, both on and off campus and among mothers, are essential for improving the knowledge and management of PCOS. Implementing structured teaching programs, fostering greater awareness, and offering healthcare services specifically designed for PCOS can equip women with the tools and information needed to make informed decisions about their health.

## Implication of the Study

The findings of this study have several important implications for healthcare, education, and policy development. For healthcare providers, the study emphasizes the need for more proactive engagement in educating clients about PCOS, its symptoms, and its long-term implications. This includes offering more comprehensive healthcare services that are specifically tailored to address PCOS management. The creation of support groups and regular healthcare screenings can also provide a platform for women to access information and seek emotional and practical support.

In an academic setting, the study indicates that universities, particularly through their health services, have a pivotal role to play in disseminating information about PCOS. Integrating PCOS education into university health services, along with awareness campaigns and educational sessions, could significantly improve the knowledge and management of PCOS among young women, potentially reducing the long-term health consequences of the condition.

Lastly, policymakers can use these findings to guide the development of initiatives aimed at improving reproductive health education at both institutional and national levels. Addressing the gaps in knowledge about PCOS management could contribute to broader health outcomes, including better reproductive health and overall well-being for women in Nigeria.

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