

Impact of PCOS- Associated Dermatologic Changes on Mental Health

Schemide Zetrenne¹, Alexis Kendall, MS.¹, Aaliyah Bourne, MPH.¹

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INTRODUCTION

- Polycystic Ovarian Syndrome (PCOS) affects up to 20% of individuals with a uterus during reproductive age and is characterized by elevated levels of androgens and insulin.
- PCOS leads to various metabolic and reproductive issues, including irregular menstrual cycles, excessive weight gain, insulin resistance, and infertility.
- 90% of PCOS patients exhibit cutaneous manifestations such as acne vulgaris, hirsutism, and androgenic alopecia.
- The psychological impact of PCOS-associated dermatologic manifestations has been identified as a significant research priority, necessitating a multidisciplinary treatment approach.

AIM

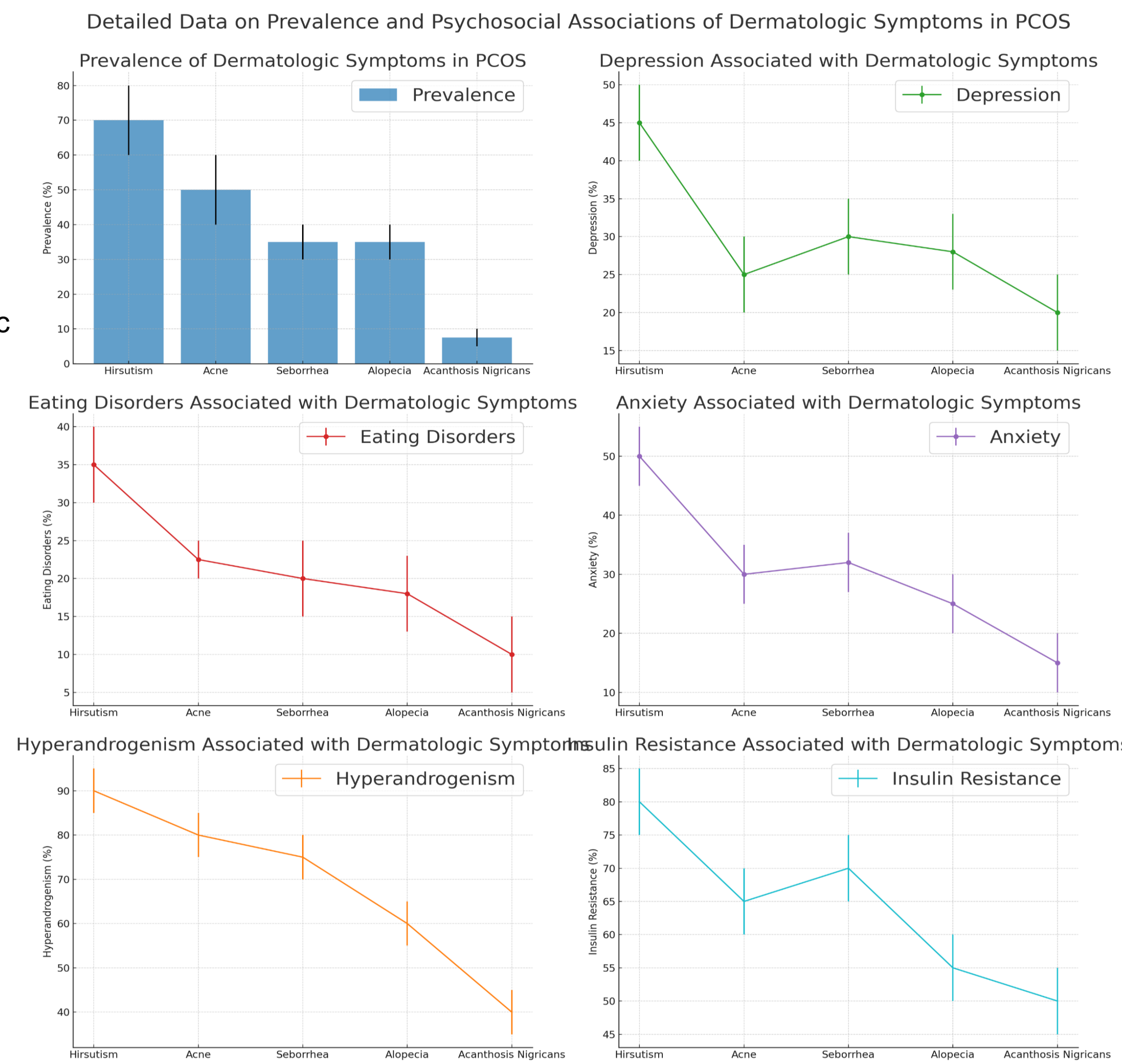
Our study explores the psychosocial effects of dermatologic manifestations in PCOS, aiming to address the identified research gap and highlight the need for a multidisciplinary treatment approach.

METHOD

- Conducted a systematic literature review on the psychosocial effects of dermatologic symptoms in patients with Polycystic Ovarian Syndrome (PCOS) from 2000 to 2024.
- Initial screening of titles and abstracts was followed by a thorough full-text review to ensure inclusion criteria were met, focusing on the relationship between PCOS-related dermatologic symptoms and mental health outcomes.
- Assessed the quality of studies using standardized tools and extracted relevant data for synthesis.
- Performed thematic analysis to identify key psychosocial issues such as body image concerns, self-esteem, anxiety, and depression.

RESULTS

- The results presents summarized data on the prevalence and psychosocial associations of dermatologic symptoms in women with Polycystic Ovarian Syndrome (PCOS). The values shown are averages derived from multiple peer-reviewed articles. Standard deviations are included to indicate the variability and range of data reported in the literature.



CONCLUSIONS

- **Profound Psychosocial Impact:** Dermatologic symptoms in PCOS significantly affect mental health, increasing anxiety, depression, and social isolation.
- **Critical Hormonal and Metabolic Factors:** Addressing hormonal imbalances and insulin resistance is essential for managing symptoms.
- **High Risk of Mental Health Disorders:** PCOS increases the risk of depression, anxiety, and eating disorders.
- **Multidisciplinary Approach Needed:** Effective management requires lifestyle changes, medication, and psychological support.
- **Ongoing Research Essential:** Further studies are necessary to improve understanding and treatment of PCOS-related dermatologic and psychological issues.

DISCUSSION

- **Psychosocial Impact of Dermatologic Symptoms in PCOS**
Dermatologic symptoms like hirsutism, acne, seborrhea, androgenic alopecia, and acanthosis nigricans are common in women with PCOS and significantly affect psychological health. Hirsutism, prevalent in about 72% of women, is associated with increased anxiety and depression due to societal stigma and visible symptoms leading to social isolation and low self-esteem. Acne, affecting 52%, also causes emotional distress and social withdrawal. Seborrhea and alopecia, present in approximately 35% of women, contribute to body image dissatisfaction and psychological morbidity, while acanthosis nigricans, though less common, adds to psychological stress.
- **Association with Metabolic and Hormonal Factors**
These dermatologic symptoms are linked to hormonal imbalances and metabolic dysfunctions in PCOS. Hyperandrogenism, with elevated testosterone levels, drives hirsutism, acne, and alopecia. Insulin resistance exacerbates these conditions by increasing free testosterone and decreasing SHBG levels. Addressing both hormonal and metabolic dysfunctions is crucial for effective symptom management.
- **Mental Health Concerns**
Depression is significantly more prevalent in women with PCOS, influenced by hormonal imbalances, metabolic issues, and the psychosocial burden of visible symptoms. Insulin resistance contributes to depression through inflammation and oxidative stress pathways. Anxiety is common, particularly with visible symptoms like hirsutism and acne, leading to social anxiety. The drive to meet beauty standards increases the risk of eating disorders, especially with severe dermatologic symptoms.
- **Comprehensive Management**
Effective management of PCOS requires a multidisciplinary approach, including lifestyle modifications, pharmacological treatments, and psychological support. Lifestyle changes like diet and exercise reduce insulin resistance and improve overall health. Pharmacological treatments, such as hormonal therapies and insulin sensitizers, manage hyperandrogenism and dermatologic effects. Psychological interventions, particularly Cognitive Behavioral Therapy (CBT), significantly reduce depressive and anxiety symptoms, enhancing coping mechanisms and body image.

REFERENCES



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CONTACT INFORMATION

Schemide Zetrenne: zetrenneschemide@gmail.com
Alexis Kendall: alexiskendall20@gmail.com
Aaliyah Bourne: Aaliyah.bourne@hotmail.com