

Healing Beyond Prescriptions:

Managing PCOS Through Sustainable Lifestyle Changes

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For many individuals with polycystic ovary syndrome (PCOS), their body can feel as though it is constantly working against all efforts to improve. Irregular periods that never seem to follow a pattern, stubborn acne and hair growth in all the wrong places, unexplained weight gain, or even the frustration of trying to conceive with no success; these are just a few of the frustrations faced by women with PCOS. These difficulties may be intensified when healthcare professionals provide reductive explanations, labeling the symptoms as “normal”, caused by improper dietary choices or mental exhaustion. A recent study has highlighted the years of misdiagnosis that women with PCOS endure due to experiences of dismissive medical care. This contemptuous medical attitude deepens their sense of alienation (Kelley, 2025). Given this finding, it is imperative to investigate the gaps in PCOS management to develop targeted strategies accordingly.

PCOS is classified as one of the most prevalent endocrine disorders, affecting approximately 6-13% of women of reproductive age worldwide, with approximately 70% of affected women being undiagnosed (World Health Organization, 2025). In fact, millions are the women who frustratingly try to navigate the fluctuating symptoms of PCOS without further investigation into their underlying cause. This alarming rate of under-diagnosis underscores the need for greater awareness, as early diagnosis could be the key to preventing the exacerbation of symptoms.

The challenges posed by PCOS extend far beyond its pervasiveness. Misinformation, medical oversight, wrong diagnoses, and the lack of fixed solutions shroud this disorder. The symptoms are diverse, not limited solely to reproductive health, but extending to metabolic reactions, mental health, and future disease risks. In fact, women with PCOS tend to be at a greater risk of anxiety and body dysmorphia than those without the disorder (Cooney et al., 2017). This unpredictable nature of PCOS highlights the pressing need for a more holistic approach to PCOS management, one that acknowledges both the physical and psychological aspects of the disorder.

On one hand, medical treatments, including medical contraceptives and anti-androgens (drugs that block androgen hormones, such as testosterone (Healthline, 2024)) have long been the

standard protocol for managing PCOS symptoms. On the other hand, modern medicine is increasingly exploring the positive correlation between lifestyle factors, such as increased physical activity and healthy diets, and the delayed onset of PCOS symptoms; however, they remain contentious and less universally accepted, despite growing evidence of their potentially equal benefits. This reluctance to integrate such changes could stem from various causes, the most obvious one being the patients' lack of knowledge on such unconventional solutions, which reinforces the need for mobilization efforts.

But the questions we should be asking with the most urgency are: What does the future hold for those women with PCOS? Could lifestyle changes manage symptoms while also redirecting the trajectory of this condition?

As the investigation on PCOS evolves, it is becoming evident that it has a myriad of manifestations. Thus, PCOS management requires a more individualized nuanced technique that goes beyond symptom alleviation and rather focuses on its long-term health implications. This review aims to explore the effectiveness and sustainability of lifestyle interventions in managing PCOS. How significant are the improvements? How realistically will women be able to adopt these lifestyle changes for the rest of their lives? What limitations stand in the way of compliance, and how can they be defeated?

Problem Analysis Framework

- A. Not only do lifestyle interventions efficiently help manage existing PCOS symptoms, but they may also delay their onset, especially in high-risk populations.
 - 1. Introducing targeted lifestyle adjustments during adolescence or early womanhood can mitigate the symptoms of PCOS.
 - a. Adolescence is the best time to take action as the body can easily adapt.
 - b. Building an early foundation is key to combat PCOS to the fullest.
 - 2. Implementing lifestyle changes early on can play a pivotal role in delaying the manifestation of PCOS.
 - a. Early commitment leads to minimal manifestation and a healthier quality of life.

- b. The physical manifestation of PCOS could be almost fully prevented.
- 3. Lifestyle modifications allow individuals to target the underlying metabolic imbalances that lead to PCOS.
 - a. The Mediterranean Diet (MD) and the low-glycemic index (GI) diet are widely recommended diets for PCOS women.
 - b. Chronic issues such as insulin sensitivity and hormonal imbalance are targeted by healthy diets and frequent exercise.
 - c. Regular exercise has been shown to reduce oxidative stress and chronic inflammation.
- B. The integration of lifestyle interventions for PCOS management remains underutilized as it is regarded as a supplementary rather than a primary solution.
 - 1. Lifestyle interventions are recognized as fundamental first-line therapy for PCOS.
 - a. This academic recognition fails to translate into clinical practice.
 - b. Implementation is hindered by both healthcare professionals and patients.
 - 2. Healthcare professionals tend to prioritize pharmacological treatments over lifestyle changes, and there are not any firm protocols for implementation.
 - a. Oral contraceptive pills (OCPs) are immediately prescribed upon diagnosis with PCOS.
 - b. Prescription bias indirectly leads to low patient adherence.

The Preventive Role of Early Lifestyle Interventions in PCOS

Lifestyle interventions used to combat PCOS primarily encompass dietary modifications and physical exercise, and the benefits of each of them will be explored extensively below.

When the seven-day food records of women with PCOS were compared to those of women without PCOS, the former group showed a less healthy dietary pattern, consuming more simple carbohydrates and saturated fatty acids, and fewer complex carbohydrates, fibers, and monounsaturated fatty acids. This unhealthy pattern culminates in insulin resistance, hyperandrogenemia, and inflammation, which are key PCOS symptoms (Barrea et al., 2019,

p.14). Thus, adapting diets such as the MD and a low-GI diet can significantly mitigate specific risk factors that exacerbate PCOS development.

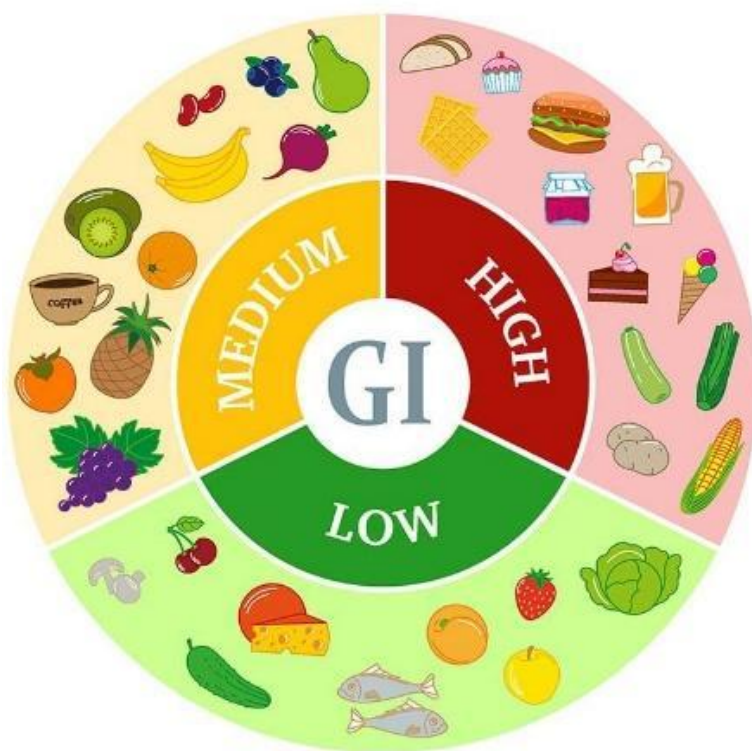
The Mediterranean ketogenic diet is based on plant-based foods, healthy fats, and lean protein sources. It greatly limits the intake of high-dairy products and red meat and prohibits processed foods, refined grains and sugars, trans fats, and alcohol (Zhou, 2023). The MD is highly advised for women with PCOS as it is inversely linked with adiposity, insulin resistance, risk of type 2 diabetes mellitus, and cardiovascular disease (Barrea et al., 2019, p.14), all of which being correlated with PCOS.



(Cleveland Clinic, 2024)

Low glycemic index diets are centered around foods that cause a slow and steady increase in blood glucose levels after consumption, minimizing blood sugar and insulin spikes. Foods that

have a low-GI score consist of carbohydrates absorbed relatively slowly by the body and include legumes, whole grains, fiber-rich foods, meat, and poultry. A randomized controlled trial by Sordia-Hernandez et al. (2016) has found that low-GI diets can effectively counteract chronic anovulation caused by the hormonal imbalances associated with PCOS. Adapting this diet is most appealing to women struggling with PCOS who are looking to conceive. Similarly, “nutrient D supplementation in nutrient D insufficient PCOS ladies was noted to improve total ovulation rate” (Nosseir et al., 2021, p.272).



(Nutribalance, 2020)

A randomized controlled trial involving women with PCOS tailored customized lifestyles that emphasized healthy diet and physical activity. The aim of this program was to boost exercise levels and to clearly address typical challenges that hinder participation. Implementing these lifestyle interventions yielded a notable decrease in perceived obstacles to physical activity and increased motivation. Results included drops in BMI, total cholesterol levels, and waist circumference, all of which not only improve health and life expectancy, but also significantly

restore self-esteem and resilience, while reducing oxidative stress and chronic inflammation (Gautam et al., 2025, p.19).

Emerging research highlights the importance of early lifestyle interventions not only in the management of PCOS, but also in the delay of its onset. Adolescence is a critical window where the integration of lifestyle changes can reduce the lifelong burdens that accompany PCOS.

Doing so may prevent the syndrome from fully manifesting later in life; it is a crucial preventive measure given the fact that PCOS often goes undiagnosed until years after its symptoms have started. Adopting healthy habits early on, like making mindful nutritional choices, staying active, and sticking to them, can pay off in more ways than one may expect, such as regulating menstruation cycles and lowering androgen levels (Shukla et al., 2025).

Introducing lifestyle changes early on is more challenging than it might initially seem; it requires a deep sense of commitment. It may seem overly demanding, but this early foundation builds the discipline needed to maintain these behaviors as one enters adulthood.

The Discrepancy Between Evidence and Practice: Underutilization of Lifestyle Interventions in PCOS

Although lifestyle interventions have demonstrated significant effectiveness through extensive research, potentially surpassing pharmacological treatments, their worth is often overshadowed by long-standing traditional protocols. An international evidence-based guideline on PCOS recommends lifestyle interventions as the first-line approach to managing symptoms (Lim et al., 2019, p.5). Lim provides instances of second-line treatments such as ovulation induction agents for anovulatory infertility in PCOS but reemphasizes the fact that lifestyle interventions remain the primary therapeutic approach across most PCOS types.

Healthcare professionals tend to prioritize pharmacological treatments over lifestyle changes, and there are not any firm protocols for implementing them. Many healthcare providers initially prescribe oral contraceptives (OCPs) to regulate menstrual cycles. This approach is particularly common among adolescents, who may find themselves reliant on OCPs for extended periods. As a result, they are prone to health risks including weight gain and psychological distress (Fagg, 2024, p.11). Over time, additional medications are introduced to

counter the known effects of OCPs. This prescribing pattern reflects the financial interests embedded in the healthcare system, whether stemming from physicians or pharmaceutical companies. This type of bias is strikingly more evident when evidence-based nonpharmacological strategies are not employed despite having proven their efficacy.

This pharmacological emphasis contributes significantly to low patient adherence to nonpharmacological treatments. It inadvertently grows the perception that such lifestyle changes are less effective in the patients' subconscious mind. When the healthcare system, which is supposed to serve as the primary source of medical guidance, discriminates between treatments, misconceptions and stigmatizations will inevitably emerge. This systemic challenge not only complicates efforts to create more balanced PCOS management, but it also narrows patient choice, undermining the principle of informed consent.

Policy Recommendations

Despite being acknowledged as the recommended first-line therapy for the management of PCOS, lifestyle interventions remain sidelined and constantly outshined by pharmacological drugs in everyday clinical practice. This long-standing dilemma cannot be attributed to a lack of scientific knowledge, but rather stems from a myriad of challenges that limit the normalization of such interventions. The major constraints include limited clinical awareness, inadequate provider training and availability, economic barriers, and persistent misinformation.

This section outlines targeted policy recommendations that address the inaccessibility of lifestyle interventions in PCOS healthcare. The scope of these strategic proposals encompasses several fields, ranging from the public health framework to the education sector.

- A. Integrate PCOS Screening and Awareness Campaigns Focusing on Lifestyle Changes.
- B. Incorporate Lifestyle Medicine Competencies into the Medical Training of Gynecologists and Primary Care Physicians.
- C. Ensure Access to Affordable Nutrition and Fitness Services for Diagnosed Women.

A. Integrate PCOS Screening and Awareness Campaigns Focusing on Lifestyle Changes

This policy is to be applied particularly on the educational scale, where adolescents and young women can get the chance to assess their reproductive health. Adolescence is the period when the first signs of PCOS – irregular cycles, acne, weight fluctuations – begin to appear but are often dismissed and deemed as the natural aspects of a teenager's development.

Thus, integrating PCOS screening and awareness campaigns at schools and universities is a crucial first step towards early recognition and prevention. The existing process for diagnosing PCOS cannot be easily applied on such a wide scale, as it requires sophisticated methods such as hormonal testing and complex imaging techniques, which would be too costly to perform on a regular basis. A more accessible way would be a prescreening tool that raises suspicions for high-risk women and refers them to professionals for confirmation of diagnosis. A tool proposed by Kalra et al. (2023) could offer a model to follow: "It consists of six questions, structured into three domains: menstrual/maternity, metabolic and 'misfit masculinity' (dermatological)". Returning two or more positive answers in more than one of the three domains could be indicative of underlying PCOS and should be followed by proper diagnosis.

It is primarily the role of the Ministries of Education and Health, in cooperation with school and university health centers, to implement this policy. As for the awareness aspect, NGOs focused on women's health are the ones encouraged to take the first step and visit academic institutions to offer the awareness that most individuals lack pertaining to PCOS. It is essential to offer lifestyle counseling that emphasizes the role of exercise and balanced nutrition in managing PCOS symptoms, as well as professional referrals to affordable nutritional and mental support services.

Many are the promising outcomes of such a project, including early detection, early commitment to a healthier lifestyle, and reduced long-term complications. Nonetheless, addressing menstrual health could trigger potential challenges such as cultural stigma and privacy concerns in conservative institutions.

B. Incorporate Lifestyle Medicine Competencies into the Medical Training of Gynecologists and Primary Care Physicians

It may be true that lifestyle medicine has been in circulation for countless generations, but the extent to which it is factually applied in practice is alarmingly low. With the American College of Lifestyle Medicine being established in 2004, it is unfortunate to note that its principles remain underrepresented in most medical curricula. Traditional medical education places significantly more emphasis on pharmacological treatments than on preventive and holistic care strategies. As a result, rarely are medical graduates exposed to modules that extensively approach lifestyle medicine, let alone cover specific cases such as PCOS. This calls for the necessity to equip all physicians, particularly gynecologists and primary care physicians for PCOS management, with evidence-based ways to integrate lifestyle medicine into patient care.

Evidence-based practice (EBP) requires the deliberate integration of three essential elements: the strongest available scientific evidence, the physician's professional expertise, and the individual patient's preferences and unique circumstances (Physiopedia, n.d.). Within this approach, treatment decisions are not driven by long-standing protocols, but by their critical appraisal and application in the context of clinical practice and patient priorities. In the framework of PCOS, EBP would entail drawing on clinical trials demonstrating the benefits of structured lifestyle interventions, while simultaneously considering the professional's own experience with similar patient cases and the patient's values and preferences. Such practices enhance the likelihood of long-term adherence and improved clinical outcomes, such as menstrual regularity, metabolic health, and fertility.



(Physiopedia, n.d.)

In light of EBP, the policy proposed involves the formal training of gynecologists and primary care physicians in PCOS-related lifestyle medicine. The key stakeholders involved include medical institutions, accreditation council, ministries of health and education, and national medical licensing boards. Hand in hand, they can ensure that future physicians gain the required skills and confidence to master preventive care. Said physicians would learn how to create sustainable meal plans and recommend efficient exercise routines curated for each patient they encounter.

A Pakistani study examined the integration of lifestyle medicine in undergraduate medical education at Riphah International University in Pakistan. It states that the primary reason for this change was the increasing cases of lifestyle-related diseases and unavailability of training required to treat such diseases among physicians. The updated curriculum included six pillars of lifestyle medicine, them being: exercise, nutrition, sleep matters, stress and resilience, substance abuse, and the power of connection (Sadiq et al., 2023).

This policy calls for the integration of lifestyle medicine techniques not just at the undergraduate level, but all throughout their medical training journey. The most crucial time to gain practical experience on lifestyle medicine would be during residency.

The timeline for curriculum reform could span five to ten years, but updating syllabi may be faced with opposition from proponents of traditional pharmacological treatments. Training educators may also be a logistical hurdle, which is why mandatory workshops should be completed by all doctors in medical schools.

C. Ensure Access to Affordable Nutrition and Fitness Services for Diagnosed Women

No woman having PCOS, not even the most motivated one wanting to regain control over her own body, is able to adopt lifestyle modifications without the necessary resources. Indeed, a considerable number of women diagnosed with PCOS come from low socioeconomic backgrounds, which limits their access to the most effective agents to combat this syndrome. A Danish cohort study found that women with income in the lower tercile were more likely to be diagnosed with PCOS than those with higher income (Rubin et al., 2018).

To address this disparity, governments should introduce subsidies specific to reducing the financial burden on women with PCOS. Measures that could be taken include government-funded consultations with licensed dietitians, discounted gym memberships, and partnerships with coaches willing to offer their services for reduced prices.

Additionally, without guidance from registered dietitians and licensed fitness instructors, women desperate for help turn to the internet in search of quick fixes. This in turn may lead to the adoption of unsafe practices recommended by influencers and anecdotal resources. Some 'hacks' promoted by such unofficial sources include extreme physical exertion and unregulated supplements that may further disrupt hormonal imbalances. Others seek support through online communities where people with similar challenges share advice. However, this often results in dissatisfaction; a survey of 1385 women diagnosed with PCOS indicated that "only 11.9% reported satisfaction with information provided about beneficial diet and exercise" (Arentz et al., 2021, p.5). Thus, another way through which the accessibility gap could be bridged is through the integration of official digital health platforms. This is known as E-health

intervention and could be structured as mobile applications or virtual counseling services. It is essential that these digital tools be developed and endorsed by official and reputable medical and governmental institutions to ensure that the users obtain accurate information and guidance.

Conclusion

Polycystic ovary syndrome is a multifaceted condition, and a high rate of research attention has been directed towards it lately, with promising strategies being uncovered that reinstate hope and control over one's body. Ensuring that patients are fully educated about all effective management options, including nonpharmacological ones, is essential to uphold ethical standards. The implementation of the policy measures listed in this paper requires multidisciplinary collaboration among different sectors to successfully transcend the limitations caused by misinformation and economic constraints, among others. The ultimate goal is to move toward more holistic and patient-centered approaches that lead to early diagnosis and mitigation of further complications such as type 2 diabetes, cardiovascular disease, and infertility. Moreover, ongoing investigation and policy reform are critical to ensure equitable access to informed treatment options, away from commercial influence. Additional aspects of PCOS can be explored, such as the possibility of lifestyle interventions having epigenetic complications that affect future generations. Ultimately, this paper showcases the growing scientific consensus that women no longer have to accept PCOS as a terminal "disability"; they can fight back with resilience and confidence.

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