

# Balancing Dermatological and Gynecological Considerations: Evaluating the Necessity of Pelvic Exams in OCP Prescriptions for Acne Management

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## ABSTRACT

Routine pelvic examinations in women prescribed oral contraceptive pills (OCPs) for acne management are scrutinized to assess their impact on dermatological outcomes versus gynecological health. A synthesis of clinical trials, patient surveys, and medical guidelines reveals that these routine exams do not significantly enhance the effectiveness of acne treatment with OCPs but are linked to increased patient discomfort and false-positive results. Evidence suggests that routine pelvic examinations do not significantly impact the effectiveness of acne management with OCPs but are associated with increased patient discomfort and higher rates of false-positive results. The analysis indicates that a more personalized approach, focusing on selective pelvic examinations based on individual risk factors and clinical symptoms, may offer a more practical and patient-centered alternative. The review advocates for a reexamination of existing guidelines to better align with a model of individualized care, emphasizing the need for further research to optimize best practices at the intersection of dermatological and gynecological care. Adopting a personalized approach to pelvic examinations could substantially improve patient care by minimizing unnecessary interventions and discomfort while maintaining the efficacy of acne treatment with oral contraceptive pills.

## 1. INTRODUCTION

Oral contraceptive pills (OCPs) have been a cornerstone in dermatological treatment, particularly for managing hormone-related acne. Acne vulgaris is a prevalent skin condition driven by a combination of hormonal, genetic, bacterial, and environmental factors. Hormonal fluctuations, particularly an increase in androgen levels, play a pivotal role by stimulating excess sebum production, which can clog pores and create an ideal environment for acne development [1]. Genetic predisposition also contributes to acne severity, as individuals with a family history of acne are more likely to experience breakouts [2]. The bacterium *Cutibacterium acnes* (*C. acnes*), which thrives in sebum-rich conditions, contributes to inflammation within clogged pores, exacerbating lesion formation [3]. Additionally, environmental factors, such as humidity, pollution, and certain skincare products, alongside lifestyle influences like a diet high in dairy and high-glycemic foods, can trigger or worsen acne [4]. A variety of factors emphasize the necessity for personalized, multifaceted treatment strategies that cater to the specific combination of contributors in each individual.

Oral contraceptive pills can modulate the hormonal aspects of acne vulgaris by reducing androgen levels, which decreases sebum production and helps prevent acne lesion formation [1]. A triphasic combined oral contraceptive containing ethinyl estradiol (EE) and norgestimate (NGM) has demonstrated significant reductions in acne lesions, particularly in women who experience flares during their menstrual cycles. Research shows over a 50% reduction in inflammatory lesions, comedones, and total lesion count compared to placebo [5]. Further, Jaisamrarn *et al.* showed a 74.4% reduction in total acne lesions after six months of treatment [6]. The combination of EE and drospirenone was also effective, with a 66.8% reduction in total lesions after six treatment cycles, and was particularly effective in reducing both inflammatory and non-inflammatory lesions [7]. This combination is also noted for its safety and high patient satisfaction. While the use of OCPs for acne treatment is generally considered safe, with few serious adverse effects reported in clinical trials, minimal risks, such as an increased risk of venous thromboembolism, exist. However, many dermatologists contend that the benefits of OCPs for acne treatment outweigh these risks, particularly with the newer generations of OCPs that aim to minimize such concerns [8]. Commonly observed side effects like mild nausea, headaches, and breast tenderness are typically transient and reside as treatment continues.

Despite their dermatological benefits, prescribing OCPs has historically been linked to routine pelvic examinations, intended to screen for gynecological conditions, such as cervical cancer and sexually transmitted infections (STIs). However, the necessity of such exams in acne management remains controversial. OCPs have been studied for their potential association with cervical cancer and STIs. While some studies have explored the relationship between OCP use and gynecological conditions, the evidence remains inconclusive. For instance, Rahmawati *et al.* found that long-term OCP use, especially beyond five years, was associated with an increased risk of cervical cancer, with women using OCPs up to nine times more likely to develop cervical cancer compared to non-users [9]. Guo *et al.* corroborated these findings, noting a 195% increased risk of cervical cancer among OCP users, even after adjusting for demographic and lifestyle factors [10]. However, the direct link between OCP use and STIs is less clear, though some studies suggest that OCP use, in combination with HPV infection, may elevate cervical cancer risk [11]. Initially, pelvic exams were included in the OCP prescription process to monitor for such risks. Over time, the need for pelvic examinations in OCP prescriptions, particularly for non-gynecological uses like acne management, has been called into question due to evolving guidelines and diagnostic advancements. Authoritative bodies, such as the American College of Obstetricians and Gynecologists (ACOG) and the Centers for Disease Control and Prevention (CDC), have questioned the requirement for routine pelvic exams when prescribing OCPs solely for acne management.

The inclusion of pelvic exams in dermatological care is increasingly criticized due to the discomfort and anxiety these exams often provoke [12-15]. Many women experience heightened anxiety and stress during pelvic exams due to psychological factors like fear of pain, embarrassment, or past negative experiences. This is particularly true for younger women or those with no prior sexual activity, who may find the exams invasive and distressing [16]. Fear of pain and embarrassment over undressing are significant contributors to this anxiety, often leading to reluctance in beginning or adhering to OCP treatment for acne [12, 13].

Another concern is false positives resulting from routine pelvic screenings, which can lead to unnecessary medical interventions and increase the emotional and financial burdens on patients. False positives in tests like Pap smears can result from sampling or interpretive errors, prompting invasive follow-up procedures like biopsies or colposcopies [14]. These exams have minimal impact on acne treatment outcomes, yet they contribute to the complexity and costs of care.

Additionally, research has shown poor agreement among physicians on pelvic exam findings, further questioning the reliability of such exams in the context of acne treatment [15]. The advent of noninvasive diagnostic methods, such as urine-based STI tests, reduces the need for routine pelvic exams in patients using OCPs for acne.

Given these concerns, the necessity of routine pelvic exams in OCP prescriptions for acne is increasingly scrutinized. While pelvic exams can be useful in specific contexts, their routine use for acne management appears to add unnecessary complexity and stress to patient care. This paper evaluates the impact of routine pelvic exams on dermatological outcomes for women prescribed OCPs for acne. By synthesizing findings from clinical trials, patient surveys, and medical guidelines, this analysis will explore whether incorporating routine pelvic exams enhances acne treatment effectiveness or simply introduces additional clinical burdens. Furthermore, it will propose personalized, risk-based strategies for pelvic exams in these patients, advocating for updated guidelines that better align dermatological and gynecological care.

## 2. DISCUSSION

### 2.1. Overview of General Treatment Practices for Acne Vulgaris

Acne vulgaris treatment is typically tailored to the severity of the condition, starting with topical therapies for milder cases. According to the guidelines by Reynolds *et al.*, first-line topical treatments include benzoyl peroxide, which is recommended for its bactericidal properties to reduce *C. acnes* on the skin, and salicylic acid, known for its exfoliating action that helps prevent clogged pores [17]. Topical retinoids, such as adapalene and tretinoin, are also emphasized in the guidelines for their efficacy in promoting cell turnover and reducing comedone formation. For patients with moderate acne, topical antibiotics may be added to further address inflammation, with guidelines recommending their combination with benzoyl peroxide to minimize bacterial resistance [17]. Many treatments are often used together to maximize effectiveness and are adjusted based on patient response and tolerability.

For moderate to severe acne, guidelines additionally support the use of systemic treatments, which are often necessary to manage symptoms effectively [17]. Reynolds *et al.* endorse oral antibiotics, such as doxycycline and minocycline, for their ability to reduce inflammation and target *C. acnes* in patients with more severe symptoms [17, 18]. However, Santer *et al.* emphasize that antibiotic use should be limited to short-term treatments, highlighting the growing concern over antibiotic resistance [18]. Additionally, hormonal therapies, specifically OCPs, are recommended as an effective option for females with hormonally driven acne [18]. Hormonal therapies work by lowering androgen levels, which subsequently decreases sebum production. Guidelines also suggest anti-androgen medications, such as spironolactone, to complement OCPs by further blocking androgen effects on the skin's sebaceous glands [17, 18]. For patients with severe or treatment-resistant acne, isotretinoin is strongly recommended due to its potent ability to reduce sebum production and provide long-term remission in many cases.

In addition to medication, current guidelines emphasize lifestyle modifications and professional procedures as essential components in managing acne vulgaris. Patients are advised to use non-comedogenic skincare products, maintain a consistent cleansing routine, and consider dietary adjustments. As Ryguła *et al.* explain, certain dietary factors, such as high-glycemic foods and dairy products, can exacerbate acne by increasing insulin and IGF-1 levels, which in turn activate pathways that elevate androgen levels and sebum production [4]. Dietary influences highlight the importance of reducing high-glycemic foods as part of an acne management strategy. Professional treatments, including chemical peels, laser therapy, and radiofrequency devices, are also recommended for more persistent cases or residual scarring [4]. Certain procedures can improve skin texture, reduce acne lesions, and stimulate collagen production, thereby enhancing overall

skin appearance [4, 17]. By combining these approaches, healthcare providers can create comprehensive and personalized treatment plans that address the unique factors contributing to each patient's acne.

## 2.2. Overview of OCPs in Dermatological Care

Oral contraceptive pills are widely recognized in dermatology for effectively treating hormone-related acne, particularly in women who experience acne flares during their menstrual cycle. During certain phases of the menstrual cycle, such as the luteal phase, there is a surge in androgen levels like testosterone and androstenedione [19]. This increase in androgens stimulates sebum production, causing follicular occlusion and fostering the proliferation of acne-causing bacteria like *C. acnes*. OCPs primarily function by regulating hormonal fluctuations, reducing acne severity and lesion formation, making them an essential component of comprehensive acne management.

Combined estrogen-progestin oral contraceptive pills (COCs), which consist of both estrogen and progestin hormones, are the most effective and only FDA-approved oral contraceptives for acne treatment. The progestin component, such as levonorgestrel, desogestrel, and drospirenone, reduces ovarian androgen production by suppressing luteinizing hormone. Additionally, certain second-generation progestins have anti-androgenic properties, further inhibiting the effects of androgens on the skin [20]. For example, drospirenone, a component of the FDA-approved COC Yaz, acts as an androgen receptor blocker, reducing androgen activity at sebaceous glands [21]. The estrogen component of COCs suppresses androgen activity by increasing levels of sex hormone-binding globulin (SHBG), which binds free testosterone decreasing its availability to stimulate sebaceous glands [22]. This combination of reducing free androgens and blocking androgen receptors makes OCPs particularly effective for women suffering from hormonal acne.

However, not all hormonal contraceptives are equally effective for acne management. Progestin-only-pills (POPs) are less commonly prescribed for acne because they can be less predictable in their effects compared to COCs. Some types of progestin in POPs, like norethisterone, have androgenic effects and may worsen acne by stimulating sebum production [20]. Others, such as noretynodrel and dimethisterone, may have neutral or slightly anti-androgenic effect [23]. Additionally, POPs lack the estrogen component, which plays a vital role in reducing androgens and sebum production, limiting their efficacy in acne treatment.

Clinical evidence supports the efficacy of oral contraceptive pills (OCPs) in acne management. Several randomized controlled trials (RCTs) have shown that OCPs significantly reduce both inflammatory and non-inflammatory acne lesions. For instance, a meta-analysis of placebo-controlled trials concluded that women using combined OCPs experienced a significant reduction in acne lesions compared to baseline, with noticeable improvements seen within 3 to 6 months of starting treatment [24]. In another RCT, a specific combined oral contraceptive demonstrated a 40% reduction in total lesion counts from baseline, with 80% of participants reporting improved self-assessments after treatment, a figure notably higher than that of the placebo group [25]. These findings highlight OCPs as an effective treatment option for acne, contributing to both lesion reduction and increased patient satisfaction.

In comparison to systemic antibiotics, a meta-analysis of thirty-two RCTs found that OCPs were equally effective in reducing acne lesions after six months [26]. OCPs, however, offer an advantage over antibiotics as they target the underlying hormonal causes of acne, rather than simply reducing bacterial load. While antibiotics are generally limited to short-term use due to the risk of bacterial resistance, OCPs are suitable for long-term maintenance therapy. Since OCPs do not possess antibacterial properties, they do not contribute to bacterial resistance, making them particularly valuable for sustained acne management in hormonally driven cases [27]. By modulating hormone levels to decrease sebum production, OCPs offer a sustainable treatment pathway without exacerbating the issue of antibiotic-resistant bacteria.

## 2.3. The Role of Routine Pelvic Examinations in OCP Prescriptions

Despite the dermatological benefits of OCPs, their prescription has historically been tied to routine pelvic examinations, a practice that originated when OCPs were primarily used for contraceptive purposes. At the time, concerns about the potential gynecological risks of OCPs, such as cervical cancer and STIs led

to the inclusion of routine pelvic exams to monitor reproductive health [28]. These exams were viewed as a necessary precaution for women using OCPs, especially if they were sexually active, to ensure they received regular gynecological care, including Pap smears and STI testing.

However, with the expanded use of OCPs for non-gynecological conditions, such as acne, the necessity of routine pelvic exams has been increasingly questioned. In recent years, medical guidelines from leading organizations like the American College of Obstetricians and Gynecologists (ACOG) and the Centers for Disease Control and Prevention (CDC) have shifted toward a more individualized approach to pelvic exams. For example, ACOG, now advises that routine pelvic exams are not required for healthy women using OCPs for acne treatment, as long as there are no specific gynecological symptoms [29]. Pelvic and breast examinations, cervical cancer screening, and STI screening are not required before initiating hormonal contraception [29]. Instead, pelvic exams should be based on clinical indications, rather than being a blanket requirement for all OCP prescriptions. Moreover, research shows that women who obtain OCPs without routine pelvic exams, such as those purchasing OCPs from pharmacies in Mexico, maintain similar rates of Pap tests and STI screening as those obtaining OCPs from U.S. clinics, suggesting that the lack of pelvic exams does not negatively impact gynecological care [29]. By removing the requirement for routine pelvic exams in acne treatment, healthcare providers can streamline access to OCPs, ensuring that women receive timely dermatological care without unnecessary procedural barriers, while still maintaining high standards for overall gynecological health through individualized screening protocols. The shift in guidelines reflects the evolving understanding of the role of pelvic exams in OCP prescriptions. According to the Center for Disease Control (CDC), pelvic exams are still recommended for women with certain risk factors, such as those who are pregnant, use an intrauterine contraceptive device, or have received treatment for STIs [30]. However, for women using OCPs solely for acne treatment, routine pelvic exams may offer little benefit and can instead increase patient discomfort, particularly for young women or those without a history of sexual activity [31]. As medical perspectives continue to shift, removing the requirement for routine pelvic exams in dermatological care increases access to OCPs for women with acne. It allows dermatologists to expand their treatment options without subjecting patients to unnecessary medical interventions. This evolution in practice is essential in reducing barriers to effective acne management, promoting a more patient-centered approach to care.

## 2.4. Critique of Routine Pelvic Examinations for Dermatological Patients

There is no evidence to suggest that routine pelvic examinations are necessary for the effective management of acne when prescribing oral contraceptive pills. The primary action of OCPs in treating acne is through hormonal regulation, specifically the suppression of androgens that stimulate sebum production. This mechanism reduces the formation of acne lesions and is entirely unrelated to gynecological findings that might be obtained through a pelvic exam. While pelvic exams have historically been tied to OCP prescriptions—largely due to their use in contraception—no studies have shown that these exams impact the effectiveness of OCPs in acne treatment. The estrogen-mediated suppression of sebum production, which is the core therapeutic benefit in dermatology, occurs independently of any pelvic examination outcomes [32]. As such, requiring these exams in otherwise healthy patients using OCPs for acne is not only unsupported by the evidence but also an unnecessary medical intervention.

Pelvic examinations can cause significant distress for many patients, often leading to fear, embarrassment, and discomfort [33]. These negative experiences are not uncommon and can cause lasting psychological effects, particularly when the exams are unnecessary and invasive without a clear medical indication. The American College of Physicians (ACP) advises against performing screening pelvic exams against asymptomatic patients, noting that they can lead to misdiagnosis, overtreatment, and related complications [34]. Moreover, these exams increase patient anxiety, fear, and discomfort without providing any benefit to acne treatment [34]. In addition to patient distress, routine pelvic exams contribute to increased healthcare costs and unnecessary healthcare burdens, as they offer no improvement in morbidity or mortality rates.

Patients who experience chronic pain, particularly during intercourse, are especially vulnerable to the negative effects of unnecessary pelvic exams when used for dermatological purposes [35]. For these

individuals, the exam may be more than just physically uncomfortable—it can be emotionally challenging due to both examination-related and psychological factors. Despite recommendations against unnecessary pelvic exams, the practice persists. A cross-sectional analysis revealed that between 2011 and 2017, approximately 2.6 million young people aged 15 - 20 years underwent bimanual pelvic examinations, with an estimated half being potentially unnecessary [30]. This suggests a significant gap between clinical practice and current guidelines, exposing many patients to unnecessary procedures. Dermatologists, therefore, should focus on the patient's dermatological conditions and needs, thereby preventing unnecessary emotional and physical harm.

Patient experiences further underscore the potential harm of unnecessary pelvic exams. A survey of 6,508 women revealed that 47% found pelvic exams to be embarrassing, 35% described them as painful, and 19% considered the experience traumatic. Alarmingly, only 43% of the respondents reported that they would notify the examiner if they experienced pain or discomfort during the examination [36]. This highlights a critical communication gap in clinical care, where patients may feel too embarrassed or fearful to express physical discomfort. Such reluctance suggests that many patients endure unnecessary pain in silence, likely due to the intimidating nature of pelvic exams and the perceived authority of the healthcare professional. This dynamic may hinder the development of trust between patients and providers, ultimately affecting the quality of care. It raises important questions about how clinicians can better create an environment where patients feel comfortable and empowered to speak up, especially during intimate and potentially distressing procedures.

A separate study by Yanikkerem *et al.* further illuminates the emotional impact of pelvic exams [37]. In their research involving 433 patients, 54.8% of participants reported feeling anxious or worried about the exam, and 41.8% said they were embarrassed about having to undress. These findings reveal that for many patients, the physical aspect of pelvic exams is compounded by emotional distress, which may contribute to an aversion to seeking regular healthcare. The act of undressing in a clinical setting is often a source of vulnerability, making patients feel exposed and uncomfortable, particularly in the context of a pelvic exam, where the procedure is both physically invasive and psychologically charged. This underlines the importance of healthcare providers being sensitive to the emotional well-being of their patients and considering alternative approaches or additional support to minimize feelings of anxiety and embarrassment.

Qualitative studies, such as those by Oscarsson *et al.*, delve deeper into the personal experiences of women undergoing pelvic exams, uncovering themes of fear, pain, and humiliation [38]. These studies reveal that many patients associate pelvic exams with negative emotions, often feeling powerless or objectified during the process. For some, the procedure triggers memories of past trauma, particularly for survivors of sexual violence or those with post-traumatic stress disorder (PTSD), who report heightened levels of distress during pelvic exams. The emotional toll of these exams can linger long after the procedure is completed, with many women viewing the exam as an unnecessary or harmful experience rather than a routine medical check-up. This insight underscores the need for a more trauma-informed approach in clinical settings, where the emotional and psychological state of the patient is given as much consideration as the physical examination itself.

Pelvic exams also carry a high rate of false-positive results, leading to unnecessary follow-ups and increased healthcare costs. A systematic review by the US Preventive Services Task Force (USPSTF) evaluated the diagnostic accuracy and potential harms of screening pelvic exams in gynecologically asymptomatic patients. The review highlighted the risks associated with performing pelvic exams in patients without gynecological symptoms, such as those seeking acne treatment. The review found that unindicated pelvic exams can lead to a significant number of false positive results, which in turn increase patient anxiety and follow-up interventions [39]. These false positives can lead patients to believe they have a medical condition, often necessitating additional interventions and invasive diagnostic procedures, which contribute to both rising healthcare costs and psychological strain.

Given the lack of evidence supporting a link between pelvic exams and acne outcomes, continuing this practice adds unnecessary steps to the treatment process and may even deter some patients from seeking care. Current medical guidelines, including those from the ACOG, now recommend pelvic exams only for

patients presenting with gynecological symptoms, such as abnormal bleeding or pelvic pain [40]. For dermatological purposes, such as managing acne with OCPs, these exams provide no clinical benefit. Eliminating routine pelvic exams in this context would not only reduce patient anxiety but also streamline care, allowing for quicker access to effective acne treatment and minimizing unnecessary healthcare costs. This shift toward evidence-based, patient-centered care reflects a broader movement in medicine to tailor interventions to the specific needs of the patient, avoiding outdated practices that do not contribute to improved outcomes.

## 2.5. Personalized Approach to Pelvic Examinations

High acne prevalence in specific populations, such as young adults and medical students, underscores the importance of tailored dermatological care. For example, a study by Zari *et al.* reported a 98% prevalence of acne among female medical students in Jeddah, revealing a significant need for effective treatment options for hormonally driven acne [41]. Given the demands and stress often associated with medical training, targeted interventions, including the use of OCPs, can be particularly beneficial for this demographic [41]. Furthermore, advanced treatments like fractional radiofrequency (FRF) have shown promise in managing both active acne and its scarring, with Hellman *et al.* demonstrating significant improvements in skin texture and scar depth reduction following FRF treatment [42]. Recent advancements highlight the need for a multifaceted approach to acne management that can be adapted to individual patient needs.

A personalized approach to pelvic examinations is essential for building a strong doctor-patient relationship, especially when prescribing oral contraceptive pills for acne management. This approach involves conducting individualized risk assessments that focus on patient-specific factors such as sexual history, family predisposition to gynecological conditions, and the presence of clinical symptoms. By tailoring the need for pelvic examinations to each patient's unique medical background, healthcare providers can reduce unnecessary procedures for those without significant risk. For instance, in women using OCPs solely for acne management, a pelvic examination may not be warranted unless specific risk factors, like a family history of cervical cancer or symptoms indicative of gynecological issues, are present. Such a patient-centered model prioritizes comfort and safety, aligning closely with the principle of "first, do no harm." This individualized approach ultimately enhances patient care by minimizing unnecessary interventions while preserving the effectiveness of OCPs in treating acne.

Obstetricians-gynecologists play a critical role in a patient's overall health and well-being by taking a comprehensive medical history and offering appropriate services and counseling. A key consideration in this patient-centered approach is sexual activity. For patients who are not sexually active, routine pelvic exams may not be necessary. Alternatively, sexually active patients may require more frequent pelvic examinations based on their sexual history, OCP needs, or symptoms of any STIs. It is additionally important to consider the patient's family history. This component is critical in a comprehensive medical evaluation, as those with a family history of gynecological cancers may require more frequent exams. For patients with a family history of gynecological cancers, more frequent pelvic exams may be warranted, in line with individualized care tailored to specific risk factors. However, as previously noted, the USPSTF has found no significant benefit in performing routine pelvic exams for asymptomatic women without such risk factors, underscoring the importance of a risk-based approach. This distinction highlights the importance of moving away from one-size-fits-all protocols and instead focusing on patient-specific factors to guide medical decision-making. By adopting a more personalized, risk-based approach, healthcare providers can optimize care, reducing unnecessary interventions while ensuring that high-risk patients receive the appropriate level of attention.

When clinical symptoms are present, the ACOG recommends pelvic examinations. For example, symptoms such as abnormal bleeding, dyspareunia, pelvic pain, sexual dysfunction, vaginal dryness, vaginal bulge, urinary issues, or inability to insert a tampon are indications for pelvic examination [43]. Additionally, pelvic exams may be necessary for women undergoing procedures like an endometrial biopsy or intrauterine device (IUD) placement. Similarly, patients with cervical dysplasia, gynecologic malignancy, or in-

utero diethylstilbestrol exposure should receive pelvic exams in accordance with guidelines specific to those conditions. However, in the absence of such symptoms or procedures, sparing the patient from the discomfort and risk of false positives is vital.

Tailored examination protocols have demonstrated improved patient outcomes in various fields of medicine, underscoring their potential efficacy in dermatological care. For example, personalized screening in oncology, based on genetic predisposition, has minimized unnecessary procedures while effectively identifying those at higher risk. Similarly, in dermatology, case studies involving women using OCPs for acne who received selective pelvic exams based on individualized risk factors have shown higher patient satisfaction, greater adherence to treatment, and fewer unnecessary interventions. These examples highlight the value of a personalized care approach, particularly in areas where routine screenings may not be directly beneficial.

In the context of OCP prescriptions for acne management, obstetricians-gynecologists should aim to obtain updated and comprehensive medical, surgical, and family histories during each preventive health visit. By emphasizing specific individual risk factors, such as sexual activity, family history, and clinical symptoms, healthcare providers can focus their interventions on what is truly necessary, ensuring patient safety while avoiding unnecessary procedures. This patient-centered and individualized model of care shifts away from a standardized application and instead tailors pelvic exams to the unique needs of each patient. By focusing on individualized care, obstetricians-gynecologists can enhance the quality of care, ultimately improving patient outcomes and ensuring that each patient's specific needs are met.

## 2.6. Areas for Future Research

The success of these tailored models in other specialties supports the potential for individualized pelvic examination protocols for dermatological patients using OCPs. Future research should focus on refining the criteria for when pelvic exams are necessary, considering both dermatological and gynecological risk factors. There remains a scarcity of recent research specifically addressing the efficacy of personalized pelvic exam protocols for dermatological patients using OCPs. For example, one cross-sectional study comparing practice gaps among dermatologist residents and attending physicians with OB/GYN residents and physicians, found that dermatologists performed female pelvic region examinations in only 36.1% of cases [44]. Furthermore, an analysis of 73 dermatology survey responses revealed widespread dissatisfaction with training on the inspection of female genitalia [44]. These findings suggest that gaps in training may affect clinical practices, highlighting the need for improved education and research on when pelvic exams are warranted in dermatology.

Long-term studies are also needed to assess the impact of personalized screening protocols on patient outcomes, comfort, and healthcare costs, ensuring alignment with both patient-centered care and evidence-based medicine. For instance, a study on the accessibility of OCPs found that, despite guidelines by the World Health Organization (WHO) and the ACOG stating that OCPs can be safely prescribed without pelvic exams, many health professionals still require them [45]. This practice has been criticized for creating access barriers and unnecessarily delaying contraceptive initiation. The study also noted that many women prefer to forgo pelvic exams and start the OCPs immediately, with no increased risk of cervical cancer. Furthermore, a secondary analysis from a randomized trial on contraceptive access found that 13.2% of 1490 participants delayed medical visits to avoid pelvic exams, and 32.8% preferred to avoid the exams altogether. Those with a history of coerced sex were even more likely to delay care due to the exam requirement [46]. These findings suggest that reducing unnecessary pelvic exams could enhance access to OCPs without compromising patient safety.

Additional longitudinal studies examining both dermatological and gynecological outcomes in women using oral contraceptive pills without routine pelvic exams are essential to fully understand the long-term impacts of changing clinical practices. Such studies should explore whether eliminating routine pelvic exams affects the efficacy of OCPs in acne management and investigate potential unintended consequences related to gynecological health. Patient-reported outcomes regarding preferences and comfort with personalized

protocols would provide valuable insight into patient satisfaction and adherence to treatment, further guiding clinical recommendations. Although pelvic exams can diagnose abnormalities like cervical polyps, uterine fibroids, ovarian enlargement, and some genital tract infections, other screening methods, such as the Pap smear, are more effective for cancer screening. Additionally, routine pelvic examination may not be necessary in younger women using OCPs for contraceptive or dermatological purposes, as these exams are more relevant to post-menopausal women, who are at increased risk for cancers like endometrial and uterine cancer [47].

Future research should prioritize large, multi-center trials to generate statistically significant data on these outcomes. Collaborative studies between dermatology and gynecology could help establish clearer guidelines for when pelvic exams are warranted, considering both dermatological and gynecological risk factors. This interdisciplinary approach could also explore biomarkers or predictive factors that better indicate the need for pelvic exams, bridging the gap between the two fields. Such collaboration would ensure that patients receive comprehensive care, addressing both skin and reproductive health without unnecessary interventions. Exploring innovative approaches, such as using telemedicine for follow-ups or developing non-invasive diagnostic tools to replace pelvic exams, would further prioritize patient comfort while maintaining high standards of care. As clinical guidelines evolve, the insights gained from these interdisciplinary studies could serve as the foundation for patient-centered models that balance the needs of both dermatological and gynecological health.

### 3. CONCLUSION

The evolving understanding of OCP use in dermatology, particularly for acne management, necessitates a thorough reassessment of routine pelvic examination protocols. By aligning clinical practice with the latest guidelines and evidence, healthcare providers can reduce unnecessary interventions while maintaining effective acne management. The historical rationale for these exams, rooted in gynecological risk mitigation, is increasingly out of step with contemporary evidence demonstrating their lack of impact on dermatological outcomes, particularly in acne treatment. Emerging data indicate that routine pelvic exams contribute to unnecessary patient discomfort, increased anxiety, and a higher prevalence of false positives, without improving therapeutic efficacy. By integrating the latest clinical guidelines and evidence, healthcare providers can adopt a more refined, patient-centered approach that emphasizes selective pelvic examinations based on individualized risk factors, such as sexual history, family predisposition, or clinical symptoms. A shift toward tailored care has the potential to enhance patient experience, reduce unnecessary medical interventions, and preserve the utility of OCPs as a critical tool in acne management. Future research should focus on developing more refined guidelines that prioritize patient-centered care, allowing for selective pelvic examinations based on individualized risk factors rather than routine practice. This approach could improve the overall patient experience and ensure that OCPs continue to be a valuable tool in the dermatological management of acne. Incorporating a more personalized and evidence-based approach to pelvic examinations for women prescribed OCPs for acne not only optimizes patient care and comfort but also aligns dermatological practices with modern clinical evidence, improving both gynecological and dermatological outcomes.

### CONFLICTS OF INTEREST

The authors declare no conflicts of interest regarding the publication of this paper.

### REFERENCES

1. Del Rosso, J.Q. and Kircik, L. (2024) The Cutaneous Effects of Androgens and Androgen-Mediated Sebum Production and Their Pathophysiologic and Therapeutic Importance in Acne Vulgaris. *Journal of Dermatological Treatment*, **35**, Article ID: 2298878. <https://doi.org/10.1080/09546634.2023.2298878>
2. Muinovna, K.F. and Kizi, K.F.A. (2024) The Role of Genetic Mutations in the Development of Acne. *American*

3. Sun, L., Yu, Q., Peng, F., Sun, C., Wang, D., Pu, L., *et al.* (2024) The Antibacterial Activity of Berberine against *Cutibacterium Acnes*: Its Therapeutic Potential in Inflammatory Acne. *Frontiers in Microbiology*, **14**, Article 1276383. <https://doi.org/10.3389/fmicb.2023.1276383>
4. Ryguła, I., Pikiewicz, W. and Kaminiów, K. (2024) Impact of Diet and Nutrition in Patients with Acne Vulgaris. *Nutrients*, **16**, Article 1476. <https://doi.org/10.3390/nu16101476>
5. Grandi, G., Guariglia, G. and Facchinetti, F. (2023) The Role of Combined Oral Contraceptives Containing Norgestimate for Acne Vulgaris Treatment: A Review. *The European Journal of Contraception & Reproductive Health Care*, **28**, 184-191. <https://doi.org/10.1080/13625187.2023.2197539>
6. Jaisamrarn, U., Chaovitsaree, S., Angsuwathana, S. and Nerapusee, O. (2014) A Comparison of Multiphasic Oral Contraceptives Containing Norgestimate or Desogestrel in Acne Treatment: A Randomized Trial. *Contraception*, **90**, 535-541. <https://doi.org/10.1016/j.contraception.2014.06.002>
7. Zhang, G.Y., Lin, T. and Sun, Q.N. (2015) An Oral Contraceptive Containing Ethinyl Estradiol and Drospirenone for the Treatment of Women with Moderate Acne Vulgaris: A Randomized, Multicenter, Placebo-Controlled Clinical Trial. *Chinese Journal of Dermatology*, **48**, 85-89.
8. Fitzpatrick, L., Mauer, E. AND Chen, C.L. (2017) Oral Contraceptives for Acne Treatment: US Dermatologists' Knowledge, Comfort, and Prescribing Practices. *Cutis*, **99**, 195-201. <https://pubmed.ncbi.nlm.nih.gov/28398414/>
9. Lutfi Rahmawati, D., Rahayu, D.E. and Hardjito, K. (2023) Correlation between Oral Contraceptive Use and the Incidence of Cervical Cancer. *Poltekita: Jurnal Ilmu Kesehatan*, **16**, 497-504. <https://doi.org/10.33860/jik.v16i4.1285>
10. Guo, C., Zhan, B., Li, M., Yue, L. and Zhang, C. (2024) Association between Oral Contraceptives and Cervical Cancer: A Retrospective Case-Control Study Based on the National Health and Nutrition Examination Survey. *Frontiers in Pharmacology*, **15**, Article 1400667. <https://doi.org/10.3389/fphar.2024.1400667>
11. La Vecchia, C. and Boccia, S. (2014) Oral Contraceptives, Human Papillomavirus and Cervical Cancer. *European Journal of Cancer Prevention*, **23**, 110-112. <https://doi.org/10.1097/cej.0000000000000000>
12. Sharma, K., Venkadalakshmi, V., Dhandapani, M., Gainder, S. and Singh, T. (2024) Assessment of Anxiety and Stress among Women Undergoing Hysterosalpingography in a Nehru Hospital, PGIMER, Chandigarh. *Nursing & Midwifery Research Journal*, **20**, 124-128. <https://doi.org/10.1177/0974150x241249253>
13. Lee, J.M.-, Tan, T.Y., Chua, C.S.L., Cheong, X., Goy, R.W.L., Ang, S.B., *et al.* (2022) A Qualitative Study of Patients' Experience during Vaginal Examination & Transvaginal Ultrasound in a Tertiary Hospital in Singapore. *The Journal of Sexual Medicine*, **19**, S98-S98. <https://doi.org/10.1016/j.jsxm.2022.10.134>
14. Lin, M., Narkcham, S., Jones, A., Arnylagos, D., DiPietro, B., Okafor, O., *et al.* (2022) False-Negative Papanicolaou Tests in Women with Biopsy-Proven Invasive Endocervical Adenocarcinoma/Adenocarcinoma *in Situ*: A Retrospective Analysis with Assessment of Interobserver Agreement. *Journal of the American Society of Cytopathology*, **11**, 3-12. <https://doi.org/10.1016/j.jasc.2021.08.001>
15. Shafer, M.-. (2001) How Good Is the Pelvic Examination, and Is It Being Upstaged by Newer Technologies? *Western Journal of Medicine*, **175**, 244-245. <https://doi.org/10.1136/ewjm.175.4.244>
16. Millstein, S.G., Adler, N.E. and Irwin, C.E. (1984) Sources of Anxiety about Pelvic Examinations among Adolescent Females. *Journal of Adolescent Health Care*, **5**, 105-111. [https://doi.org/10.1016/s0197-0070\(84\)80008-x](https://doi.org/10.1016/s0197-0070(84)80008-x)
17. Reynolds, R.V., Yeung, H., Cheng, C.E., Cook-Bolden, F., Desai, S.R., Druby, K.M., *et al.* (2024) Guidelines of Care for the Management of Acne Vulgaris. *Journal of the American Academy of Dermatology*, **90**, 1006.e1-1006.e30. <https://doi.org/10.1016/j.jaad.2023.12.017>

18. Santer, M., Burden-Teh, E. and Ravenscroft, J. (2023) Managing Acne Vulgaris: An Update. *Drug and Therapeutics Bulletin*, **62**, 6-10. <https://doi.org/10.1136/dtb.2023.000051>
19. Skiba, M.A., Bell, R.J., Islam, R.M., Handelsman, D.J., Desai, R. and Davis, S.R. (2019) Androgens during the Reproductive Years: What Is Normal for Women? *The Journal of Clinical Endocrinology & Metabolism*, **104**, 5382-5392. <https://doi.org/10.1210/jc.2019-01357>
20. Darney, P.D. (1995) The Androgenicity of Progestins. *The American Journal of Medicine*, **98**, S104-S110. [https://doi.org/10.1016/s0002-9343\(99\)80067-9](https://doi.org/10.1016/s0002-9343(99)80067-9)
21. Stalas, J., Morris, R., Bu, K., von Bargen, K., Largmann, R., Sanford, K., *et al.* (2024) Comparing the Risk of Deep Vein Thrombosis of Two Combined Oral Contraceptives: Norethindrone/ethinyl Estradiol and Drospirenone/Ethinyl Estradiol. *Heliyon*, **10**, e26462. <https://doi.org/10.1016/j.heliyon.2024.e26462>
22. Lortscher, D., Admani, S., Satur, N. and Eichenfield, L.F. (2016) Hormonal Contraceptives and Acne: A Retrospective Analysis of 2147 Patients. *Journal of Drugs in Dermatology: JDD*, **15**, 670-674. <https://pubmed.ncbi.nlm.nih.gov/27272072/>
23. de Gooyer, M.E., Deckers, G.H., Schoonen, W.G.E.J., Verheul, H.A.M. and Kloosterboer, H.J. (2003) Receptor Profiling and Endocrine Interactions of Tibolone. *Steroids*, **68**, 21-30. [https://doi.org/10.1016/s0039-128x\(02\)00112-5](https://doi.org/10.1016/s0039-128x(02)00112-5)
24. Arowojolu, A.O., Gallo, M.F., Lopez, L.M. and Grimes, D.A. (2012) Combined Oral Contraceptive Pills for Treatment of Acne. *The Cochrane Database of Systematic Reviews*, No. 7, CD004425. <https://doi.org/10.1002/14651858.CD004425.pub6>
25. Thiboutot, D., Archer, D.F., Lemay, A., Washenik, K., Roberts, J. and Harrison, D.D. (2001) A Randomized, Controlled Trial of a Low-Dose Contraceptive Containing 20 µg of Ethinyl Estradiol and 100 µg of Levonorgestrel for Acne Treatment. *Fertility and Sterility*, **76**, 461-468. [https://doi.org/10.1016/s0015-0282\(01\)01938-0](https://doi.org/10.1016/s0015-0282(01)01938-0)
26. Koo, E.B., Petersen, T.D. and Kimball, A.B. (2014) Meta-analysis Comparing Efficacy of Antibiotics versus Oral Contraceptives in Acne Vulgaris. *Journal of the American Academy of Dermatology*, **71**, 450-459. <https://doi.org/10.1016/j.jaad.2014.03.051>
27. Alderton, I., Palmer, B.R., Heinemann, J.A., Pattis, I., Weaver, L., Gutiérrez-Ginés, M.J., *et al.* (2021) The Role of Emerging Organic Contaminants in the Development of Antimicrobial Resistance. *Emerging Contaminants*, **7**, 160-171. <https://doi.org/10.1016/j.emcon.2021.07.001>
28. Stewart, F.H., Harper, C.C., Ellertson, C.E., Grimes, D.A., Sawaya, G.F. and Trussell, J. (2001) Clinical Breast and Pelvic Examination Requirements for Hormonal Contraception. *JAMA*, **285**, 2232-2239. <https://doi.org/10.1001/jama.285.17.2232>
29. American College of Obstetricians and Gynecologists (2019) Over-the-Counter Access to Hormonal Contraception (Committee Opinion No. 788). *Obstetrics & Gynecology*, **134**, e96-e105. <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2019/10/over-the-counter-access-to-hormonal-contraception>
30. Qin, J., Saraiya, M., Martinez, G. and Sawaya, G.F. (2020) Prevalence of Potentially Unnecessary Bimanual Pelvic Examinations and Papanicolaou Tests among Adolescent Girls and Young Women Aged 15-20 Years in the United States. *JAMA Internal Medicine*, **180**, 274-280. <https://doi.org/10.1001/jamainternmed.2019.5727>
31. Bloomfield, H.E., Olson, A., Cantor, A., *et al.* (2013) Screening Pelvic Examinations in Asymptomatic Average Risk Adult Women. Department of Veterans Affairs (US). <https://www.ncbi.nlm.nih.gov/books/NBK224896/>
32. George, R., Clarke, S. and Thiboutot, D. (2008) Hormonal Therapy for Acne. *Seminars in Cutaneous Medicine and Surgery*, **27**, 188-196. <https://doi.org/10.1016/j.sder.2008.06.002>
33. Weitlauf, J.C., Finney, J.W., Ruzek, J.I., Lee, T.T., Thrailkill, A., Jones, S., *et al.* (2008) Distress and Pain during

Pelvic Examinations. *Obstetrics & Gynecology*, **112**, 1343-1350. <https://doi.org/10.1097/aog.0b013e31818e4678>

34. Qaseem, A., Humphrey, L.L., Harris, R., Starkey, M. and Denberg, T.D. (2014) Screening Pelvic Examination in Adult Women: A Clinical Practice Guideline from the American College of Physicians. *Annals of Internal Medicine*, **161**, 67-72. <https://doi.org/10.7326/m14-0701>
35. Boyer, S.C. and Pukall, C.F. (2014) Pelvic Examination Experiences in Women with and without Chronic Pain during Intercourse. *The Journal of Sexual Medicine*, **11**, 3035-3050. <https://doi.org/10.1111/jsm.12701>
36. Tancman, S., HaCohen, N., Lazarus, G., Solt, I. and Sagi-Dain, L. (2021) Silent Voices That Must Be Heard—Women’s Perceptions of Gynecologic Examinations. *Journal of Psychosomatic Obstetrics & Gynecology*, **43**, 190-197. <https://doi.org/10.1080/0167482x.2020.1864727>
37. Yanikkerem, E., Özdemir, M., Bingol, H., Tatar, A. and Karadeniz, G. (2009) Women’s Attitudes and Expectations Regarding Gynaecological Examination. *Midwifery*, **25**, 500-508. <https://doi.org/10.1016/j.midw.2007.08.006>
38. Oscarsson, M. and Benzein, E. (2002) Women’s Experiences of Pelvic Examination: An Interview Study. *Journal of Psychosomatic Obstetrics & Gynecology*, **23**, 17-25. <https://doi.org/10.3109/01674820209093411>
39. Guirguis-Blake, J.M., Henderson, J.T. and Perdue, L.A. (2017) Periodic Screening Pelvic Examination. *JAMA*, **317**, 954-966. <https://doi.org/10.1001/jama.2016.12819>
40. American College of Obstetricians and Gynecologists (2018) ACOG Committee Opinion No. 755: Well-Woman Visit. *Obstetrics & Gynecology*, **132**, e181-e186. <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2018/10/well-woman-visit>
41. Zari, S. and Turkistani, A. (2017) Acne Vulgaris in Jeddah Medical Students: Prevalence, Severity, Self-Report, and Treatment Practices. *Journal of Cosmetics, Dermatological Sciences and Applications*, **7**, 67-76. <https://doi.org/10.4236/jcdsa.2017.71007>
42. Hellman, J. (2015) Retrospective Study of the Use of a Fractional Radio Frequency Ablative Device in the Treatment of Acne Vulgaris and Related Acne Scars. *Journal of Cosmetics, Dermatological Sciences and Applications*, **5**, 311-316. <https://doi.org/10.4236/jcdsa.2015.54038>
43. American College of Obstetricians and Gynecologists (2018) The Utility of and Indications for Routine Pelvic Examination (Committee Opinion No. 754). <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2018/10/the-utility-of-and-indications-for-routine-pelvic-examination>
44. Kim, J.Y., Martin, A., Stuparich, M. and Dao, H. (2022) Total Body Skin Exams: The Role of Gynecology and Dermatology—A Cross-Sectional Study. *Dermatology Online Journal*, **28**, Article 3. <https://doi.org/10.5070/d328357782>
45. Henderson, J.T., Sawaya, G.F., Blum, M., Stratton, L. and Harper, C.C. (2010) Pelvic Examinations and Access to Oral Hormonal Contraception. *Obstetrics & Gynecology*, **116**, 1257-1264. <https://doi.org/10.1097/aog.0b013e3181fb540f>
46. Holt, H.K., Sawaya, G.F., El Ayadi, A.M., Henderson, J.T., Rocca, C.H., Westhoff, C.L., *et al.* (2020) Delayed Visits for Contraception Due to Concerns Regarding Pelvic Examination among Women with History of Intimate Partner Violence. *Journal of General Internal Medicine*, **36**, 1883-1889. <https://doi.org/10.1007/s11606-020-06334-8>
47. Scott, A. and Glasier, A.F. (2004) Are Routine Breast and Pelvic Examinations Necessary for Women Starting Combined Oral Contraception? *Human Reproduction Update*, **10**, 449-452. <https://doi.org/10.1093/humupd/dmh031>