

Advancing Inclusivity in Dermatological Healthcare for Transgender Individuals: A Narrative Review

Kelly Frasier¹, Vivian Li^{1,*}, Julia Vinagolu-Baur², Olivia Chapman³, Claire Baptiste⁴, Michelle Sobotka⁵

¹Nuvance Health, Vassar Brothers Medical Center, Poughkeepsie, USA

²State University of New York, Upstate Medical University, Syracuse, USA

³Mercy Health St. Elizabeth Boardman Hospital, Boardman, USA

⁴University of Vermont, The Robert Larner College of Medicine, Burlington, USA

⁵Abrazo Health Network, Goodyear, USA

*Corresponding author:

Vivian Li

Nuvance Health, Vassar Brothers Medical Center, 45

Reade Pl, Poughkeepsie, NY, USA

Email: Livivian23@gmail.com

Received : November 03, 2024

Published : November 30, 2024

ABSTRACT

Research indicates that transgender individuals exhibit hesitancy in seeking dermatological healthcare, avoiding annual exams or skin checks due to apprehensions regarding perceived stigma and judgment from healthcare providers, including dermatologists. This reluctance poses significant challenges to the dermatological well-being of the transgender population, potentially leading to delayed diagnoses of skin conditions and compromised preventive care. Existing literature underscores the need to address these barriers through targeted interventions, such as inclusive healthcare practices and education for dermatologists to foster a more supportive and affirming environment. Future research should focus on understanding the multifaceted factors contributing to this reluctance, exploring effective strategies to enhance accessibility and acceptance in dermatological healthcare for transgender individuals, and ultimately improving health outcomes within this demographic. This comprehensive review emphasizes the critical intersection of transgender health, dermatological care, and the imperative to create an inclusive healthcare landscape that addresses the unique concerns of the transgender population.

Keywords: Dermatological Healthcare, Transgender, Human Immunodeficiency Virus, Skin, Cancer

INTRODUCTION

Dermatological healthcare constitutes an integral facet of overall health maintenance, encompassing diagnostic and preventive measures vital for the identification and management of diverse skin conditions. However, current literature suggests a pronounced hesitancy amongst transgender individuals in making and attending appointments for dermatological care. This hesitancy goes beyond conventional barriers,

raising concerns about their ability to access equitable care. The reluctance is often rooted in the apprehension surrounding perceived stigma and judgment from healthcare providers, notably dermatologists, necessitating an exploration of these challenges within the scope of dermatological care for transgender individuals.

Transgender individuals, whose gender identity differs from the sex assigned at birth, grapple with distinctive challenges in navigating and accessing comprehensive healthcare. Recent investigations reveal that these challenges extend into dermatological care, where there is a notable reluctance among transgender individuals to engage in routine dermatologic examinations or skin assessments. These fears can significantly hinder transgender patients from seeking necessary care, impacting their overall health and well-being. Dermatologists play a critical role in managing skin health and must be aware of these unique challenges to provide better support.

The impact of this reluctance on health outcomes for transgender individuals is substantial. Research indicates that delays in diagnosing dermatological conditions are common, potentially leading to more severe complications and compromised skin health. Avoidance of routine preventive care, combined with a higher risk of specific skin issues related to gender-affirming procedures and hormonal therapies, highlights the need to address these disparities. Addressing these issues is crucial for improving healthcare outcomes and ensuring that transgender individuals receive timely and appropriate care.

The existing literature emphasizes the need for targeted interventions to overcome barriers that prevent transgender individuals from accessing equitable dermatological care. This review synthesizes current research to highlight the importance of inclusive healthcare practices and targeted education for dermatologists. Developing culturally competent and gender-affirming policies is essential for creating supportive environments within dermatological care settings. Additionally, specialized training programs for dermatologists can enhance their understanding of transgender health and improve care quality.

This review calls for action to foster supportive and affirming environments for transgender individuals in dermatological care. Implementing inclusive practices characterized by cultural competence and gender-affirming policies is central to this goal. Educational initiatives directed at dermatologists emerge as integral interventions, emphasizing the impera-

tive of specialized training programs focused on transgender health. Understanding the multifaceted factors contributing to the reluctance of transgender individuals to seek dermatological care is vital for developing effective strategies to improve healthcare access and quality.

DISCUSSION

The hesitancy of transgender individuals to seek dermatological care can be attributed to the perceived stigma and judgment from healthcare providers. Studies have shown that transgender patients often anticipate discriminatory behaviors and negative attitudes within healthcare settings, which deters them from pursuing necessary healthcare services [1-3]. This stigma manifests in various forms, from overt discrimination to more subtle biases, such as misgendering or a lack of understanding of transgender-specific healthcare needs [4,5]. The anticipation of such negative interactions contributes to a reluctance to seek care, underscoring the need for a shift towards more inclusive healthcare practices.

The 2015 U.S. Transgender Survey, a landmark study on the experiences of transgender individuals, revealed that 23% of respondents avoided seeking medical care due to fear of mistreatment [2]. Additionally, 15% of those surveyed reported encountering invasive or unnecessary questions about their transgender identity during medical visits, highlighting a lack of sensitivity and understanding within healthcare interactions. Moreover, Grant et al. found that 28% of transgender individuals had postponed necessary medical care due to fear of discrimination [6]. Alarming, 19% were outright refused care based on their gender identity, 28% faced verbal harassment, and 50% had to educate their healthcare providers about transgender health.

The impact of non-inclusive healthcare practices on the quality of life for transgender individuals cannot be overstated. A study by Fredriksen et al. demonstrated that transgender adults have significantly more chronic medical conditions compared to their cisgender counterparts, along with higher instances of poor general, mental, and physical health outcomes [7]. Dermatologists play a crucial role in the healthcare journey of sexual and gender minority (SGM) patients, often being the first point-of-contact for conditions such as dermatoses, sexually transmitted infections (STIs), and gender-affirming procedures. As such, dermatologists are uniquely positioned to lead by example in combating discrimination and fostering a welcoming environment for transgender patients.

Furthermore, a population-based survey by Feldman et al. highlighted the increased health disparities faced by transgender individuals, including higher rates of human immunodeficiency virus (HIV) and ulcers, conditions relevant to dermatological care [8]. A global analysis found that transgender women are 66 times more likely to have HIV, while transgender men are 7 times more likely [9]. This highlights the need for dermatologists to be vigilant in addressing and understanding the unique and complex health needs of transgender patients. Notably, gender-affirming treatments, preoperative hair removal, postoperative scar revision, and therapy for hormone-induced changes like acne and alopecia, play a significant role in improving the psychosocial outcomes and quality of life for transgender individuals [10,11]. These findings highlight the pressing need for dermatologists to enhance their cultural competence and actively promote an inclusive healthcare environment to improve the health outcomes and care experiences of transgender patients.

As outlined above, several barriers including judgment and stigma may contribute to the hesitancy of transgender individuals seeking dermatological care. Transgender individuals may be reluctant to complete annual exams or skin checks which poses the risk of morbidity and mortality. Several factors may contribute to reluctance to seek care. Dermatological exams are often regarded as sensitive exams. This can be due to the location of the exam as well as the patient's perceived outside perception of the skin lesion. For these reasons, patient-provider trust is paramount to the completion of and positive experience of annual checks or skin examinations. In a study analyzing the barriers and facilitating factors to skin cancer screening, Oliveria et al. found that patient embarrassment was reported as one of the top three barriers by physicians across multiple specialties [12]. Factors contributing to perceived embarrassment may include but are not limited to the need to undress, the visualization of modest areas, additional people in the room, and the cosmetic appearance of skin.

These factors are imminently true in vulnerable populations as seen in the following study. Through data sampling, Verghese et al. found gender non-conforming, genderqueer, nonbinary, and transgender individuals report significantly more discomfort after full body skin examinations compared to sexual minority cisgender females and males [13]. Further, this study reports that for genderqueer, transgender, and sexual minority cisgender females undressing during the exam contributed to discomfort. These individuals also reported more discrimi-

nation or non-affirming interactions. Being misgendered and uncomfortable examination maneuvers more significantly contributed to discomfort in transgender and genderqueer patients.

Due to the importance of frequent skin exams and the need for further disease management through follow-up, the encounter must be as comfortable as possible for the patient. Therefore, because of higher reports of discomfort as shown in this study, importance must be given to mitigate these barriers and create a more accommodating and comfortable encounter. An investigation by Najmi et al. into barriers to diagnostic skin cancer examinations found that 69% of patients do not receive examinations due to presumed low risk and 34.8% from a lack of melanoma knowledge [14]. Patients may be unaware of concerning presentations of skin diseases such as pink melanomas or the correlation of dermatological presentations with underlying systemic disease.

Barriers exist in accessing dermatological care, during dermatological care, and after encounters therefore creating a high risk of disease burden. Because of these barriers, there remains a high risk of diseases not being diagnosed, disease progression including worsening systemic involvement, and the need for step-up therapy or stronger therapeutics. This not only impacts the cost of care but also the outcomes of treatment. Delay in care may require more involved diagnosis and treatment plans. This can involve more imaging which can have long-term harmful effects, systemic therapy and associated immunosuppression, radiation, and sentinel or complete lymph node dissection [15]. Sentinel lymph node biopsy recommendations included melanomas greater than stage T1a as they can be considered for thin T1b and thick T4 and are recommended for T2 or T3 which can have longstanding side effects including lymphedema that can directly impact the patient's daily activities and quality of life [16]. With consideration of these factors, the need for accommodating care to prevent adverse effects and long-standing negative impacts can be understood.

Pre-existing distrust of healthcare providers, whether from lived experience or hearing from other transgender and gender-diverse patients, often leads to a delay in seeking out care in several medical specialties—especially endocrinology or dermatology. A recent case report, published in 2023, highlights the delayed and dramatic swelling of a transgender woman's breast due to a lack of routine surveillance [17]. The case report highlights barriers such as a lack of insurance

coverage and distrust of the U.S. healthcare system in treating trans individuals, prompting the patient to seek medical tourism—or out-of-country medical care. While the patient ultimately achieved a good outcome post-surgical-intervention, the case report describes cosmetic consequences such as volumetric asymmetry and hypopigmentation of the left nipple-areola at a three-month follow-up appointment, and the resulting dangers of if the cells extracted had been found to be malignant. While the cause of swelling was found to be benign, the authors highlight the imperative of routine monitoring and inherent risk associated with the reluctance of seeking out immediate care, due to distrust that transgender and gender-diverse patients face.

The delayed diagnosis of skin conditions can lead to both cosmetic and medical concerns. In cases where feminizing hormone therapies are prescribed, such as estradiol or antiandrogens, transgender patients may experience cosmetic concerns such as an increase in skin oiliness, a decrease in terminal hair growth, and various scalp hair changes attributed to the hormonal treatment. In the case of masculinizing hormone therapies, such as testosterone, there have been documented cases of not only an increase in skin oiliness but also acne, unwanted facial and body hair growth, and scalp hair loss [18]. These cosmetic changes often worsen if untreated, and often compound pre-existing body dysphoria and mental health conditions such as anxiety and depression that trans individuals often face. In fact, a recent study found that 33.3% of transgender individuals experience depression and 29.6% experience anxiety [19].

The pathophysiology of these conditions has been thoroughly investigated in medical literature, in particular, hormone-associated dermatological aspects of transgender care which can lead to more serious medical concerns when left untreated. In transgender women receiving estrogen, sebum production is reduced which could lead to xerosis [20]. In transgender men receiving testosterone, sebum production is increased and can lead to severe acne vulgaris [20]. A retrospective, comparative cohort study of over 46,507 transgender and cisgender adults highlighted an increase in the incidence of acne in transgender patients as a result of gender affirming hormones (GAH) [21]. The study found that the incidence of acne in transgender patients receiving masculinizing GAH was 2.4 times more than cisgender women, and 4.1 times more than in cisgender men. The study also found an increase in the prevalence of acne, from 6.3% to 31.1% following the start of masculinizing

gender affirming hormone therapy, highlighting the importance of routine dermatological care and the disproportionate incidence and prevalence of common dermatological conditions in transgender individuals.

Aside from cosmetic and commonly treated medical concerns such as acne, the delayed diagnosis of skin conditions in transgender individuals can also contribute to a number of medical conditions, many of which can quickly lead to medical emergencies. For example, while the practice of chest binding in transmasculine patients is unarguably an important gender-affirming practice, it can cause acne, pain, and itching (pruritus) in the short term. Untreated, it can also cause more serious issues such as contact dermatitis, infection, permanent scarring and miliaria as a result of blocked eccrine sweat glands and ducts [18,22]. Furthermore, surgical procedures related to gender affirmation can also pose unique risks if pre-operative and postoperative care is not managed properly.

A review of the medical literature highlights complications from delayed or incomplete preoperative procedures, that if left untreated, can result in infection. For example, incomplete preoperative hair removal of the donor site in transgender patients undergoing gender affirming surgery, can lead to the formation of “hairballs” in the neovagina of transgender women undergoing vaginoplasty [20]. Among common hygiene concerns, this can also lead to serious bacterial infections. This medical issue is complicated by the fact that there is no current method of providing post-surgical, intravaginal hair removal.

The delay of dermatological treatment in transgender individuals can also lead to compounding health problems as a result of the dual effect of commonly prescribed medications. For example, as stated previously in this review, acne typically worsens in transgender patients, particular transmasculine patients. The delayed treatment of acne can lead to permanent scarring. Isotretinoin, a common medication that treats acne, is associated with delayed wound healing. As a result, while isotretinoin may be beneficial in treating acne in transmasculine patients, it can cause complications when isotretinoin is prescribed in patients who also plan on undergoing chest masculinization surgery—causing further dermatological concerns such as delayed wound healing, and subsequently, an increased risk of infection [23].

The lack of routine screenings and preventive measures in the dermatological care of transgender individuals can cause many conditions to worsen. This is especially true in the cases

of sexually transmitted infections and HIV. Transgender women face a higher incidence of acquiring a STI and HIV, which often present with identifiable dermatologic manifestations [9]. However, these dermatologic manifestations are often not noticed in a timely manner by healthcare professionals and often escalate in severity due to a reluctance of seeking out dermatological or primary care, often due to perceived stigmas and fear of judgment by healthcare professionals.

There are numerous long-term consequences of compromised care, and compromised care can present in different ways in transgender patients. Noninvasive facial remodeling is often sought out by transgender individuals, often as an ancillary treatment to hormonal therapy and gender-affirming surgery. The most common options for noninvasive facial remodeling include neurotoxins and fillers. Neurotoxins are often used to flatter the appearance of the forehead, eyes and eyebrows, and masseter muscle of the jaw. Cosmetic fillers are often used to adjust the contour of the cheeks, chin, and volume of the lips. Due to a myriad of barriers such as high cost, lack of access, insurance and distrust in the healthcare system, many transgender patients seek out treatment from nonmedical personnel, and often seek out-of-country services. While the quality of out-of-country care depends on a number of factors, in many instances, the use of nonsterile techniques and nonmedical grade substances (such as injectable glues or cements) can lead to further medical complications [24]. Several case studies document granulomatous reactions, compromised lymphatic and vascular systems, serious infections, and even death as a consequence of nonmedical practices [25,26]. As a result, dermatologists and other physicians must be prepared to provide transgender patients with accessible alternatives and be prepared to manage these complications caused by delayed or unconventional care.

Establishing safe and affirming environments in dermatology clinics is crucial for addressing the unique healthcare needs of transgender patients. Discrimination, cisnormativity, and stigma in healthcare settings can cause transgender individuals to avoid seeking care, leading to delayed diagnoses and worsening of dermatologic conditions. This delay can result in untreated skin conditions, increased risk of infection, and heightened psychological distress [27]. Additionally, the lack of cultural humility from healthcare providers can perpetuate feelings of invisibility and marginalization among transgender patients, further impeding their access to essential healthcare services, including dermatological care [28].

Dermatologists can enhance the patient experience, health outcomes, and overall quality of life for transgender individuals by making small but significant changes to their clinical environment. Simple actions, such as indicating preferred pronouns, adopting gender-neutral language, offering gender-neutral restroom facilities, and affirming patients' identities, can greatly improve the inclusivity of a clinic [21,27,28]. Emphasizing inclusivity and sensitivity can help establish trust and foster positive relationships, leading to transparent communication with transgender patients and strengthening the patient-provider bond. Additionally, displaying LGBTQ+ stickers or flags can signal a safe and inclusive environment [29].

Furthermore, it is important to evaluate whether transgender patients are undergoing gender-affirming hormone therapy during treatment, as these medications can have various physiological and dermatological effects. For feminizing hormone treatments such as estradiol and antiandrogens, patients may experience changes like skin softening, increased skin oiliness, reduced terminal hair growth, and alterations in scalp hair [18]. Conversely, masculinizing hormone therapies like testosterone can result in outcomes such as increased skin oiliness and acne, heightened facial and body hair growth, and potential scalp hair loss in transgender individuals [18]. Therefore, dermatologists who demonstrate receptiveness and understanding of transgender patients' healthcare needs are highly valued by this patient population.

Advancing inclusivity in dermatological healthcare for transgender patients necessitates the implementation of gender-affirming policies. These policies aim to foster an environment of respect, understanding, and personalized care, effectively reducing the stigma and discrimination transgender individuals often face. Key initiatives include incorporating training medical students, residents, and dermatologists, in cultural humility and structural competency, which are crucial for better patient interactions [30]. Ensuring privacy and dignity during patient interactions and providing explicit support for transgender health needs are vital components of these policies.

Beyond policy enhancements, the education of dermatologists stands as a critical factor in ensuring healthcare providers are well-prepared to meet the specific needs of transgender individuals. Essential to this educational effort are training programs that cover transgender health issues, including the impacts of hormone therapy and gender-affirming surgeries

on dermatological health. A 2018 survey revealed a significant gap within U.S. dermatology residency programs, with 20% lacking any curriculum related to the care of SGM patients [31]. This survey also identified a significant barrier to integrating SGM-related content into curricula: the lack of faculty with relevant expertise. Additionally, a study by Hyde et al. found that 49% of dermatology residents reported feeling insufficiently prepared to provide care to LGBT individuals, highlighting notable preparation deficits in areas such as managing dermatologic issues related to gender-affirming treatments and conducting LGBT-focused patient assessments [32].

Considering that LGBT individuals constitute 7.2% of U.S. adults in 2023, the deficiency in education results in a significant disparity for transgender individuals seeking dermatological care [33]. Integrating transgender health modules into medical school curricula and providing continuing education opportunities for practicing dermatologists are imperative steps towards bridging this gap. This approach not only equips healthcare professionals with the knowledge and sensitivity to offer competent and affirming care but also encourages cultural competence by promoting an understanding of the social and cultural contexts affecting transgender patients' health experiences [27]. Dermatologists can further their cultural competence through self-reflection, actively seeking resources on transgender health disparities, and listening to the concerns and experiences of transgender patients. Such comprehensive educational initiatives and policy implementations are essential for addressing the barriers transgender individuals face, paving the way for a more inclusive, understanding, and patient-centered healthcare environment.

Research on transgender dermatological healthcare is still in its developing stages, and there exist several gaps and avenues for future exploration. Firstly, understanding the factors contributing to transgender individuals' reluctance to seek dermatological care requires a comprehensive examination of the multifaceted barriers and facilitators influencing healthcare-seeking behaviors. This includes investigating the intersectionality of gender identity with other social determinants such as race, socioeconomic status, and geographic location, which may exacerbate or mitigate barriers to accessing dermatological healthcare. Additionally, research efforts should focus on developing effective strategies to improve transgender individuals' access to dermatological healthcare. This involves evaluating the impact of interventions aimed at re-

ducing stigma, increasing healthcare provider cultural competence, and enhancing the accessibility of dermatological services for transgender patients. Furthermore, assessing the potential of telemedicine and other innovative approaches to deliver dermatological care to transgender individuals warrants investigation, particularly in regions with limited access to specialized healthcare services.

CONCLUSION

The proactive engagement of transgender individuals in dermatological care is essential to their health and well-being, ensuring timely diagnoses and enhancing preventive measures. The reluctance of this population to seek care, often due to concerns about stigma and judgment in healthcare environments, underscores the need for inclusive practices and research aimed at addressing these barriers. Therefore, it is imperative for dermatologists and other healthcare providers alike to undergo comprehensive training to enhance cultural competence and sensitivity towards transgender patients. Additionally, healthcare institutions should enforce gender-affirming policies and create visible symbols of inclusivity to signal a safe and welcoming environment. Future research should focus on developing evidence-based interventions, exploring the efficacy of telemedicine options, and analyzing the intersectionality of transgender health with socioeconomic factors and race. Through a combination of research and practical initiatives, the field of dermatological healthcare can advance towards better serving and meeting the needs of transgender individuals, promoting equity, acceptance, and optimal dermatological health.

ACKNOWLEDGEMENTS

None.

CONFLICT OF INTEREST STATEMENT

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

REFERENCES

1. Safer JD, Coleman E, Feldman J, Garofalo R, Hembree W, Radix A, et al. (2016). Barriers to healthcare for transgender individuals. *Curr Opin Endocrinol Diabetes Obes.* 23(2):168-171.

2. James SE, Herman JL, Rankin S, et al. (eds). (2016). The Report of the 2015 U.S. Transgender Survey. Available at: <https://transequality.org/sites/default/files/docs/usts/USTS-Full-Report-Dec17.pdf>. Accessed on April 7, 2024.
3. White Hughto JM, Reisner SL, Pachankis JE. (2015). Transgender stigma and health: A critical review of stigma determinants, mechanisms, and interventions. *Soc Sci Med.* 147:222-231.
4. Falck F, Bränström R. (2023). The significance of structural stigma towards transgender people in health care encounters across Europe: Health care access, gender identity disclosure, and discrimination in health care as a function of national legislation and public attitudes. *BMC Public Health.* 23(1):1031.
5. Seelman KL, Colón-Díaz MJP, LeCroix RH, Xavier-Brier M, Kattari L. (2017). Transgender Noninclusive Healthcare and Delaying Care Because of Fear: Connections to General Health and Mental Health Among Transgender Adults. *Transgend Health.* 2(1):17-28.
6. Grant J, Mottet L, Tanis J. (eds). (2010). National Transgender Discrimination Survey Report on Health and Health Care. Available at: www.thetaskforce.org/static_html/downloads/resources_and_tools/ntds_report_on_health.pdf. Accessed on May 1, 2024.
7. Fredriksen Goldsen KI, Romanelli M, Hoy-Ellis CP, Jung H. (2022). Health, economic and social disparities among transgender women, transgender men and transgender nonbinary adults: Results from a population-based study. *Prev Med.* 156:106988.
8. Feldman JL, Luhur WE, Herman JL, Poteat T, Meyer IH. (2021). Health and health care access in the US transgender population health (TransPop) survey. *Andrology.* 9(6):1707-1718.
9. Stutterheim SE, van Dijk M, Wang H, Jonas KJ. (2021). The worldwide burden of HIV in transgender individuals: An updated systematic review and meta-analysis. *PLoS One.* 16(12):e0260063.
10. Shin L, Kole LCS, Peebles JK. (2023). Legislative Efforts Restricting Care for Transgender People: Implications for Dermatologists and Patients. *JAMA Dermatol.* 159(6):583-586.
11. de Baun H, Truong T, Beloborodova A, Alper DP, Sanabria B, Rao B. (2024). Evaluating the psychosocial impact of gender-affirming dermatology treatments: A systematic review. *J EADV Clin Pract.* 3:385-400.
12. Oliveria SA, Heneghan MK, Cushman LF, Ughetta EA, Halpern AC. (2011). Skin cancer screening by dermatologists, family practitioners, and internists: barriers and facilitating factors. *Arch Dermatol.* 147(1):39-44.
13. Verghese M, Freeman JQ, Connor BW, Hazra A, Fisher AR, Rosenblatt AE. (2024). Perspectives on Full-Body Skin Examinations Among Sexual and Gender Minority Patients. *JAMA Dermatol.* 160(3):361-363.
14. Najmi M, Brown AE, Harrington SR, Farris D, Sepulveda S, Nelson KC. (2022). A systematic review and synthesis of qualitative and quantitative studies evaluating provider, patient, and health care system-related barriers to diagnostic skin cancer examinations. *Arch Dermatol Res.* 314(4):329-340.
15. Seebacher N, Oakley A. (eds). (2022). Melanoma. Available at: <https://dermnetnz.org/topics/melanoma>. Accessed on May 1, 2024.
16. Wong SL, Faries MB, Kennedy EB, Agarwala SS, Akhurst TJ, Ariyan C, et al. (2018). Sentinel Lymph Node Biopsy and Management of Regional Lymph Nodes in Melanoma: American Society of Clinical Oncology and Society of Surgical Oncology Clinical Practice Guideline Update. *J Clin Oncol.* 36(4):399-413.
17. Szymanski K, Munabi N, Garcia M, Ray E. (2023). Delayed, dramatic breast swelling in a transgender woman: a case report. *Sex Med.* 11(5):qfad054.
18. Andrus E. (eds). (2023). Dermatologists play crucial role in support and inclusivity of transgender and gender-diverse patients. Available at: <https://www.dermatologytimes.com/view/dermatologists-play-crucial-role-in-support-and-inclusivity-of-transgender-and-gender-diverse-patients>. Accessed on April 29, 2024.

19. Hajek A, König HH, Buczak-Stec E, Blessmann M, Grupp K. (2023). Prevalence and Determinants of Depressive and Anxiety Symptoms among Transgender People: Results of a Survey. *Healthcare (Basel)*. 11(5):705.
20. Ginsberg BA. (2016). Dermatologic care of the transgender patient. *Int J Womens Dermatol*. 3(1):65-67.
21. Gao JL, King DS, Modest AM, Dommasch ED. (2022). Acne risk in transgender and gender diverse populations: A retrospective, comparative cohort study. *J Am Acad Dermatol*. 87(5):1198-1200.
22. Burli A, Schlarbaum JP, Liszewski WJ, Mansh MD, Maibach HI. Allergic Contact Dermatitis in Sexual and Gender Minority Patients: Disparities and a Call to Action. *Dermatitis*.
23. Strock D, Sivesind TE, Dellavalle RP, Munding GS. (2023). Isotretinoin Use in Transmasculine Patients and Its Implication on Chest Masculinization Surgery: Scoping Review of the Literature. *JMIR Dermatol*. 6:e45351.
24. Wilson E, Rapues J, Jin H, Raymond HF. (2014). The use and correlates of illicit silicone or "fillers" in a population-based sample of transwomen, San Francisco, 2013. *J Sex Med*. 11(7):1717-1724.
25. Hage JJ, Kanhai RC, Oen AL, van Diest PJ, Karim RB. (2001). The devastating outcome of massive subcutaneous injection of highly viscous fluids in male-to-female transsexuals. *Plast Reconstr Surg*. 107(3):734-741.
26. Styperek A, Bayers S, Beer M, Beer K. (2013). Nonmedical-grade Injections of Permanent Fillers: Medical and Medicolegal Considerations. *J Clin Aesthet Dermatol*. 6(4):22-29.
27. Bhatt N, Cannella J, Gentile JP. (2022). Gender-affirming Care for Transgender Patients. *Innov Clin Neurosci*. 19(4-6):23-32.
28. Deutsch M. (eds). (2016). Creating a Safe and Welcoming Clinic Environment. Available at: <https://transcare.ucsf.edu/guidelines/clinic-environment>. Accessed on February 13, 2024.
29. Gu Y, Tang GT, Cheung AS, Sebaratnam DF. (2024). Dermatological considerations for transgender and gender diverse patients: An Australian perspective. *Australas J Dermatol*. 65(1):24-36.
30. American Academy of Dermatology Association. (2019). Position Statement on Sexual and Gender Minority Health in Dermatology. Available at: <https://server.aad.org/forms/policies/uploads/ps/ps-sexual%20and%20gender%20minority%20health%20in%20dermatology.pdf>. Accessed on February 24, 2024.
31. Jia JL, Nord KM, Sarin KY, Linos E, Bailey EE. (2020). Sexual and Gender Minority Curricula Within US Dermatology Residency Programs. *JAMA Dermatol*. 156(5):593-594.
32. Hyde JT, Trinidad JC, Shahwan KT, Nguyen C, Yeung H, Carr DR. (2022). Learning Experiences in LGBT Health During Dermatology Residency. *Cutis*. 110(4):215-219.
33. Jones JM. (eds). (2023). U.S. LGBT Identification Steady at 7.2%. Available at: <https://news.gallup.com/poll/470708/lgbt-identification-steady.aspx>. Accessed on March 3, 2024.