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Original Article

Unveiling the Challenges in Topical Corticosteroid Usage: Insights from Pharmacists and Physicians

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ABSTRACT

Background: Topical Corticosteroids (TCs) are widely prescribed for managing dermatological conditions due to their efficacy in reducing inflammation and related symptoms. However, misuse, suboptimal prescribing practices, and insufficient patient education contribute to significant challenges in ensuring safe and effective use. **Aim and Objectives:** The objective of the study was to investigate the knowledge, practices, and perceptions of community pharmacists and physicians regarding TCs usage. **Materials and Methods:** A qualitative approach Focus Group Discussions (FGDs) was conducted in Kannur District, Kerala (India) regarding TCs usage. Two FGDs were conducted separately with physicians and pharmacists and the discussions were continued until no new findings emerged. All the sessions were recorded, and transcribed. **Results and Discussion:** The FGDs highlighted that while physicians possess substantial knowledge of TC classifications and appropriate applications, gaps exist in patient communication and regulatory enforcement. Pharmacists often face pressures to dispense TCs without prescriptions due to economic constraints and market competition. Both groups reported frequent cases of misuse by patients, including improper use and application of leftover prescriptions. Adverse drug reactions, such as skin atrophy, telangiectasia, and tachyphylaxis, were reported due to long-term TC misuse. **Conclusion:** Key themes emerging from the discussions include the need for enhanced education and training for healthcare providers, stricter regulatory oversight, and improved patient education. The study recommends implementing continuing medical education programs focused on TCs, promoting patient awareness campaigns, and enforcing prescription-only sales through stricter regulation.

Keywords: Adverse drug reaction, Dermatology, Focus group discussions, Topical corticosteroids.

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INTRODUCTION

Topical Corticosteroids (TCs) play a crucial role in dermatology, as primary treatments for inflammatory skin conditions such as eczema, psoriasis, and dermatitis. These medications are categorized into different potency levels and provide relief by suppressing inflammation and modulating immune responses (Ference and Last, 2009). While TCs have proven effective in managing various dermatological disorders, their inappropriate use, often stemming from misconceptions about their safety and efficacy, has led to widespread misuse and an increase in Adverse Drug Reactions (ADRs) (Kang *et al.*, 2020). The misuse of TCs has become a global concern, with studies indicating that patients frequently use high-potency TCs without proper medical supervision. This improper usage can result in serious dermatological complications, including skin atrophy, telangiectasia, and steroid dependence (Dey, 2014). In certain regions, pharmacists struggle to adhere to regulatory guidelines, especially where the Over-the-Counter (OTC) availability of TCs is common. Unregulated access often contributes to misuse and exacerbates the risks associated with prolonged or inappropriate steroid application (Shakeel *et al.*, 2021).

India struggles with the rational use of TCs because of gaps in regulatory enforcement (Marripalli *et al.*, 2023). Additionally, the lack of widespread patient education further complicates the issue (Lee *et al.*, 2019). Studies have revealed that many pharmacists and physicians are not adequately informed about the risks associated with TCs, leading to inconsistent prescribing and dispensing practices. Additionally, economic and social pressures often influence how pharmacists dispense these medications,

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sometimes resulting in unsupervised and inappropriate TC usage. In low-resource settings, patients frequently bypass healthcare protocols, using TCs for unapproved conditions such as cosmetic purposes, further aggravating the problem (Sharma *et al.*, 2017).

To address these challenges, it is critical to understand the current prescribing practices, perceptions, and barriers faced by healthcare professionals in ensuring the rational use of TCs.

The objective of the study was to investigate the knowledge, practices, and perceptions of community pharmacists and physicians regarding TCs usage. This study seeks to explore these aspects in Kannur District, Kerala (India), through Focus Group Discussions (FGDs) with community pharmacists and physicians. The research aims to generate valuable insights into TC usage trends and highlight areas where intervention is necessary to curb misuse. By contributing to the growing body of evidence on TC application, the findings can support targeted strategies for improving dermatological healthcare practices in similar settings. Ultimately, ensuring the proper and responsible use of TCs requires stronger regulatory frameworks, enhanced awareness among healthcare providers, and comprehensive patient education. A collaborative effort between dermatologists, pharmacists, and policymakers can lead to more effective interventions, mitigating the adverse effects associated with TC misuse and improving patient outcomes.

MATERIALS AND METHODS

Study Design

This study employed a qualitative design using FGDs to explore the perspectives of community pharmacists and physicians. The FGDs were guided by a structured protocol developed based on insights from prior research and local healthcare challenges (Hennink, 2014). The FGD guidelines were meticulously designed to facilitate comprehensive discussions among physicians and pharmacists regarding TCs usage. Two separate guidelines were developed, each tailored to the distinct professional roles and practices of the target groups. The physician guidelines focused on prescribing patterns, ADRs, and patient education, while the pharmacist guidelines addressed dispensing practices, regulatory compliance, and counselling approaches.

To ensure clarity, relevance, and alignment with study objectives, the FGD guidelines underwent a rigorous validation process. A panel of five experts from each professional group - physicians and pharmacists - were consulted to evaluate the content of their respective guidelines. These experts were selected based on their clinical experience and familiarity with TCs. They assessed the guides for relevance, clarity, and appropriateness using a structured evaluation framework. The validation process employed the Content Validity Index (CVI) and Content Validity Ratio (CVR) as metrics to quantify the consensus among experts (Ebadi *et al.*, 2017). For each question in the guidelines, experts rated its essentiality. The CVR was calculated using the formula:

$$\mathrm{CVR} = \frac{(n_e - N/2)}{(N/2)}$$

Where n_e is the number of experts indicating the question as "essential", and N is the total number of experts.

A critical value of 0.99 was used, as recommended for panels of five experts (Nguyen *et al.*, 2025). Both FGD guidelines achieved a CVR of 1.0 for all items, indicating unanimous agreement on their essentiality. The CVI, calculated as the mean CVR across all questions, was also 1.0 for both guides, demonstrating their robust content validity.

The validated guides were subsequently piloted in preliminary discussions to ensure practical applicability. Feedback from these sessions affirmed the guides' ability to elicit meaningful insights, establishing them as effective tools for exploring the knowledge, practices, and perceptions of TCs among healthcare professionals. This validation process underscores the methodological rigor applied in the study to ensure data reliability and relevance.

Study Setting and Ethical Approval

The study was conducted in Kannur District, Kerala (India), a region characterized by a mix of urban and rural healthcare settings. FGDs were held in a government teaching hospital, Kannur, a tertiary care institution that serves as a central hub for medical education and patient care in the district. This venue provided a neutral and accessible location for participants, ensuring a conducive environment for open discussions. The setting enabled the inclusion of diverse perspectives from community pharmacists and physicians, reflecting the varied healthcare delivery dynamics of the district. The ethical approval was obtained from the Institutional Ethics Committee with approval number IEC/29/2022/GMCK and the study was registered in the Clinical Trials Registry-India (CTRI/2023/05053287). The participants were provided with written informed consent. Confidentiality was maintained throughout the study, with data anonymized during transcription and analysis.

Participant Selection

Eight participants were selected for each focus group including registered physicians and pharmacists in Kannur District, Kerala. Inclusion criteria ensured that participants held active registration with medical or pharmacy councils and provided informed consent to participate. Physicians were primarily drawn from dermatology and general medicine departments of tertiary care facilities at Kannur district, while pharmacists included from community pharmacy settings to capture diverse perspectives.

The selection process aimed to balance expertise and practical experience, ensuring meaningful contributions to the study objectives. Once identified, potential participants were

contacted and briefed on the study's purpose, methodology, and confidentiality protocols. Individuals who expressed willingness and provided written consent were included in the final focus group composition.

FGD Procedure

Two separate FGDs were conducted: one with eight community pharmacists and another with eight physicians. Each session lasted 50-60 min. Each focus group was facilitated by a moderator who was an expert in the respective field. The moderators were tasked with fostering open, unbiased discussions while ensuring adherence to the FGD guide. Discussions were audio and video recorded with participants' consent. A semi-structured interview guide was used, focusing on themes such as knowledge of TC classifications, adverse effects, prescribing and dispensing practices, and patient education (Flick, 2014).

Data Analysis

The recorded discussions were transcribed verbatim and analyzed using thematic analysis. Initial coding was performed independently by two researchers to identify key themes and subthemes. Discrepancies were resolved through consensus discussions, ensuring comprehensive coverage of the data.

RESULTS

The findings from the FGDs are categorized into four major thematic insight: Knowledge-practice gap, Irrational use of TCs, Lack of Diligence, and Confront the challenges. These themes encapsulate the key insights shared by physicians and pharmacists regarding the use of TCs in Kannur District, Kerala (Table 1). Key insight of FGD is illustrated in Figure 1.

Theme 1: Knowledge-Practice Gap

In physicians' perspective, they demonstrated a strong foundational understanding of TCs, particularly their classifications, potency, and the importance of application site specificity. They highlighted the need for tailored prescriptions, emphasizing that the potency and type of corticosteroid must align with the lesion type and location. For example, mild corticosteroids such as hydrocortisone acetate were recommended for sensitive areas like the face, while potent options like clobetasol propionate were reserved for more severe conditions (Zvidzayi *et al.*, 2021). Despite this knowledge, physicians admitted that time constraints often limited their ability to educate patients about the safe use of TCs, including the importance of adhering to prescribed dosages and application durations.

As per pharmacists' perspectives, they acknowledged their familiarity with the Drugs and Cosmetics (D&C) Act, which mandates prescription-only dispensing of TCs (Govt of India, n.d.). However, they admitted to facing challenges in consistently following these regulations due to market competition and customer expectations. A significant knowledge gap was evident in their limited understanding of ADRs associated with long-term TC use. Pharmacists also reported relying heavily on online resources and product inserts for drug information, reflecting inadequate training in this domain. Many pharmacists expressed a lack of confidence in counseling patients, especially regarding the identification and prevention of ADRs.

Theme 2: Irrational Use of Topical Corticosteroids

Misuse by Patients

Both physicians and pharmacists identified widespread misuse of TCs among patients. Patients often used high-potency steroids without prescriptions for non-medical purposes, such as skin whitening or to alleviate itching caused by fungal infections. Frequently used preparations include clobetasol, mometasone, and fluticasone, as well as combinations like Miconazole with Clobetasol propionate, Beclomethasone with Clotrimazole, Beclomethasone with Neomycin and Clotrimazole, and Betamethasone with Gentamicin. These practices were largely driven by misconceptions about the safety of topical applications, with many patients perceiving TCs as harmless remedies for skin conditions. Physicians noted that leftover medications from previous prescriptions or those borrowed from family members were frequently misused, exacerbating the problem.

Dispensing Challenges

Pharmacists revealed that patients often demanded TCs based on symptoms rather than medical advice. Common scenarios included presenting previously used tubes for refills or citing old prescriptions. In some cases, patients procured these medications on the advice of beauticians for cosmetic benefits. This underscores the influential role of informal advice in the widespread misuse of topical corticosteroids. Pharmacists reported feeling pressured to dispense such medications to retain customer loyalty, even when doing so violated regulations.

Impact of Irrational Use

The irrational use of TCs has led to serious medical complications, including the masking of clinical symptoms, delayed diagnoses, and the development of resistant fungal infections. Repeated use of topical corticosteroids can alter and mask the clinical presentation of dermatophytic infections like *tinea incognito*, complicating diagnosis and delaying appropriate treatment. Physicians emphasized that such practices often result in patients presenting with advanced or complicated conditions that are more challenging to treat.

Commonly Reported ADRs

Physicians and pharmacists collectively identified several ADRs associated with inappropriate or prolonged TC use. These included skin atrophy, hypopigmentation, telangiectasia, acneiform eruptions, and striae. Previous studies have reported

similar findings, documenting ADRs associated with topical corticosteroids, including *tinea incognito*, acneiform eruptions, cutaneous atrophy, rosacea, hypopigmentation, telangiectasia, irritant contact dermatitis, striae, perioral dermatitis, and hypertrichosis. Severe cases, such as steroid-induced glaucoma and systemic absorption leading to endocrine effects, were also reported in patients who used TCs on sensitive areas like the eyelids or over large body surfaces for extended periods.

Theme 3: Lack of Diligence

This theme encapsulates instances where healthcare professionals, both physicians and pharmacists, demonstrated lapses in professional rigor, often influenced by patient pressure or commercial considerations. The findings reveal that such lapses may inadvertently contribute to irrational drug use, particularly in the context of topical corticosteroids.

In physician's perspective some general practitioners were reported to prescribe combination products containing topical steroids without dermatological consultation, primarily due to patient insistence. As one respondent noted, despite the availability of referral pathways, patients often demand immediate prescriptions, leading to potentially inappropriate medication choices. Pharmacists acknowledged dispensing topical corticosteroids based on outdated prescriptions, citing customer retention and sales pressures. One participant highlighted that refusal to meet such demands often resulted in loss of clientele, indicating a tension between ethical dispensing practices and commercial viability.

Theme 4: Confront the Challenges

Awareness and Management

Pharmacists admitted to limited training in recognizing and managing ADRs. Most reported referring patients with suspected ADRs to dermatologists rather than addressing the issues themselves. Physicians, on the other hand, highlighted the need for vigilance in monitoring long-term TC users and ensuring timely interventions to mitigate risks. A notable ADR reported by both groups was *tinea incognito*, a fungal infection altered in appearance due to inappropriate TC use, which often complicates diagnosis and treatment.

Role of Education

Both groups agreed that increasing awareness about the potential risks of TCs among patients and healthcare providers is essential. Physicians advocated for incorporating ADR management training into Continuing Medical Education (CME) programs, while pharmacists suggested the inclusion of ADR reporting protocols, rational use and adverse effects of TCs in their professional education.

Regulatory Enforcement

Participants highlighted significant challenges in enforcing prescription-only regulations for TCs. Pharmacists pointed out that economic pressures and market competition often compelled them to compromise on regulatory adherence. Many expressed the need for stricter monitoring and penalties for violations to curb OTC sales of TCs.

Economic and Social Pressures

Pharmacists reported that economic pressures from private retail pharmacy management often prioritized business goals over adherence to ethical dispensing practices. Physicians noted that such pressures also influenced general practitioners in peripheral areas, who sometimes prescribed TC combinations without proper indications to meet patient demands.

Education and Training Gaps

A lack of comprehensive training programs on TC usage and ADR management was identified as a critical barrier. While dermatologists reported attending specialized CMEs on TCs, such opportunities were scarce for general practitioners and pharmacists. Participants emphasized the need for targeted training programs that address the specific roles and challenges faced by each professional group.

Collaboration and Communication

Both groups acknowledged the importance of improving collaboration between physicians and pharmacists. Physicians suggested creating standardized protocols for TC usage and patient education, while pharmacists advocated for regular inter-professional meetings to align practices and messaging.

DISCUSSION

This study delves into the multidimensional challenges surrounding the rational use of TCs among healthcare providers and patients in Kannur District, Kerala. By examining the insights from physicians and pharmacists, several critical issues have been identified, including gaps in knowledge application, misuse by patients, the prevalence of ADRs, and systemic barriers to optimal TC usage. These findings underscore the need for targeted interventions to enhance TC-related practices and policies. While physicians possess a solid understanding of TC classifications, potency, and appropriate applications, this knowledge does not consistently translate into effective patient education. Many physicians acknowledged the constraints imposed by their busy schedules, which limit their ability to provide detailed counseling. Consequently, patients often remain unaware of the potential risks of inappropriate TC use, contributing to overuse, misuse, or prolonged application beyond prescribed durations (Alamri and Al Satti, 2024). Similar findings were observed in a previously conducted study, where the misuse of Betamethasone

Valerate, combinations of clobetasol propionate with antifungals and antibiotics, Clobetasol, Mometasone Furoate, Fluticasone Propionate, and Halobetasol was reported (Mahar *et al.*, 2016).

Pharmacists, as frontline healthcare providers, face additional challenges. Their knowledge of TCs, though sufficient to guide basic dispensing practices, is often inadequate for addressing complex issues like ADR identification or counseling on appropriate usage. A reliance on online resources and product labels, rather than formal training, highlights a critical gap in professional development. The limited engagement of pharmacists in direct patient education further weakens their role in mitigating TC misuse (Pathak *et al.*, 2023). Pharmacists frequently encounter patients requesting refills based on old prescriptions or presenting partially used tubes. In some cases, patients obtain TCs on the advice of non-medical sources, such as beauticians or social media advertisements. Similar findings were observed in a previous study, which revealed that a significant proportion of patients (59.3%) using topical corticosteroids on their faces had received recommendations from non-physician sources such as friends, relatives, pharmacists, and beauticians (Saraswat, 2018).

A major finding of this study is the pervasive misuse of TCs among patients. The inappropriate application of high-potency corticosteroids for cosmetic purposes, such as skin whitening, reflects a dangerous lack of awareness about the associated risks. Patients often assume that topical medications are inherently safe, leading to their use without medical guidance. This behaviour is exacerbated by easy access to TCs without prescriptions. Pharmacists frequently encounter patients requesting refills based on old prescriptions or presenting partially used tubes. These practices not only increase the likelihood of ADRs but also complicate the diagnosis and treatment of underlying conditions. The role of pharmacists in curbing TC misuse is hindered by economic pressures and competitive business environments. Many pharmacists feel compelled to accommodate patient demands to retain their customer base, even if it conflicts with regulatory requirements. Addressing this issue requires balancing ethical dispensing practices with economic realities (Sheth and Nair, 2021).

The irrational use of TCs has significant clinical implications, leading to adverse effects that complicate diagnosis and treatment. A major concern is the masking of clinical symptoms, particularly in dermatophytic infections like *tinea incognito*, where inappropriate steroid use alters the infection's appearance, making timely and accurate diagnosis difficult. A previous study by Dhaher *et al.*, also have the similar findings (Dhaher, 2020). This often results in delayed treatment, allowing the condition to progress unchecked, sometimes leading to more severe or resistant infections. Physicians emphasized that patients who misuse high-potency corticosteroids without medical guidance

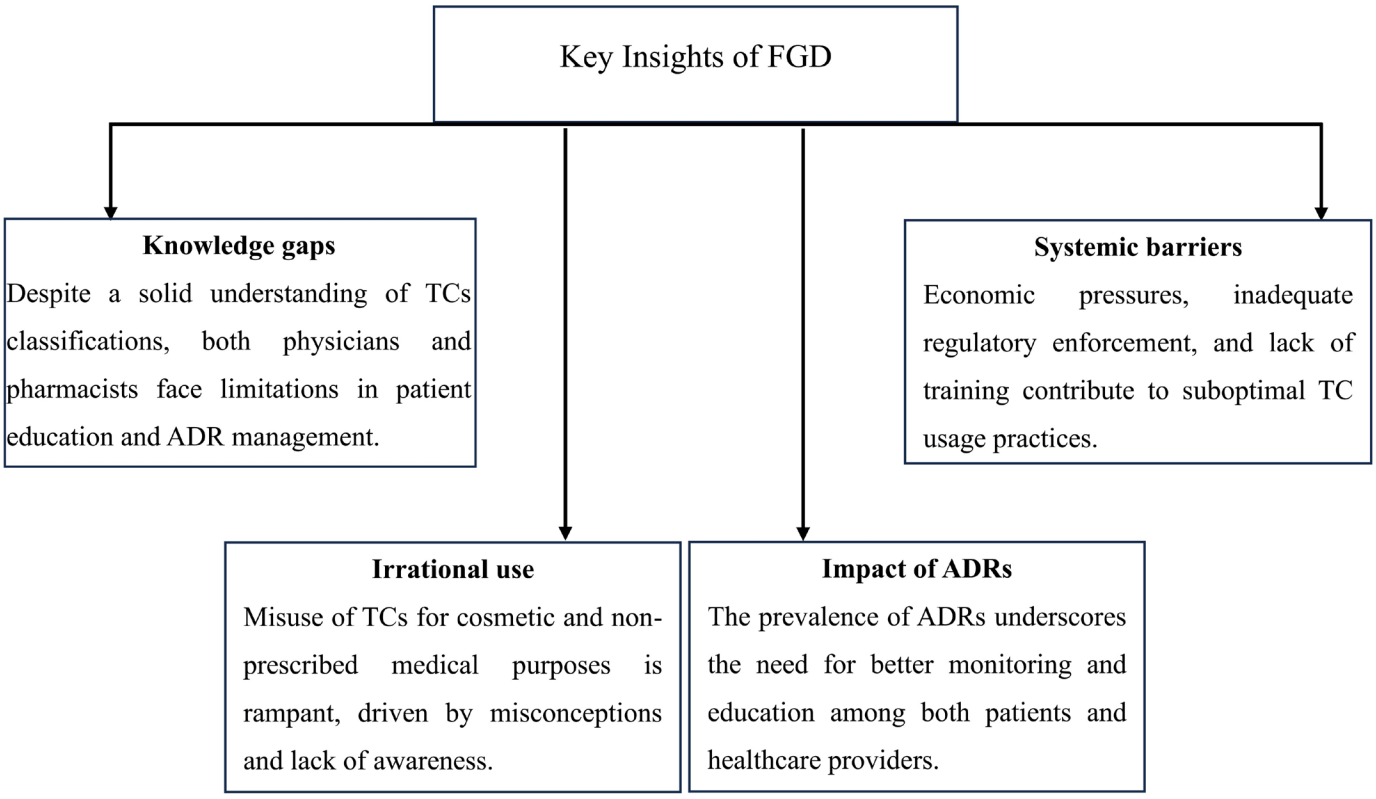

Figure 1: Key insight of FGD.

frequently present with advanced or atypical dermatological conditions, requiring more intensive therapeutic interventions. Addressing these challenges requires stricter regulations on TC distribution, improved patient awareness, and enhanced physician-pharmacist collaboration to mitigate misuse and promote rational prescribing practices.

The study identified numerous ADRs resulting from inappropriate or prolonged TC use, including skin atrophy, telangiectasia, and hypopigmentation. Previous studies have documented similar ADRs associated with TCs (Meena *et al.*, 2017). Physicians and pharmacists both reported severe cases, such as *tinea incognito* and steroid-induced glaucoma, highlighting the far-reaching consequences of misuse. Despite recognizing these risks, pharmacists rarely receive training in ADR identification or management. Most refer patients with suspected ADRs to physicians, missing an opportunity to contribute directly to patient care. Physicians, while better equipped to manage ADRs, stressed the need for continuous education to remain updated on emerging best practices.

Inadequate reporting of ADRs further complicates efforts to address this issue. A structured framework for ADR reporting and management, integrated into pharmacy and medical education, could empower healthcare providers to play a more proactive role in mitigating the impact of TC misuse. Challenges, including

Table 1: Themes, subthemes, and supporting data extracts of FGD.

Theme	Subtheme	Formulated Meanings
Knowledge-Practice Gap	**Physician**	
	Insufficient in-service education among interns and general practitioners	"While many cases involve referrals to dermatologists, some patients insist on receiving prescriptions directly from their general practitioners. Unfortunately, a significant number of these prescriptions involve combination products that contain topical steroids." (G1R8 and G1R3) "Triple combination products containing steroids are commonly prescribed by general practitioners. However, there is a challenge: these practitioners sometimes prescribe topical corticosteroid combinations and in certain cases, for fungal infections." (G1R5).
	Pharmacist	
	Inadequate training-In dispensing and counselling, time constraints	"As part of our continuing medical education, we have actively participated in various training programs. However, it is worth noting that we have not encountered any specific programs that focus on the rational use and adverse effects of TCs." (G2R8).
Irrational use of TCsMajor misuse exists among patient	**Physician**	
	Frequent misuse - A significant concernRelated Problems Development of resistanceMasking of clinical presentationDelayed diagnosis	"High-potency steroids were commonly used by patients inappropriately on their own. They may use these medications for a few days or even continuously. This may lead to the development of resistance and, in some cases, mask the clinical presentation, which leads to delayed diagnosis." (G1R6 and G1R7)"*Tinea incognito* was observed in some patients, which was obviously due to the continuous use of TCs." (G1R4).
	Pharmacist	
	Frequent requests for refills based on old prescriptions or used tubes and often without valid prescriptions.	"Patients often bring in their previously used tubes of topical corticosteroid preparations, seeking a refill." (G2R6) "Additionally, some patients arrive with old prescriptions either from their own medical history or from family members." (G2R4) "Patients may request TCs based on the symptoms they experience, such as itching, redness, or inflammation related to their skin conditions. However, caution should be exercised when individual responses to medications vary. However, they insisted on dispensing medication." (G2R7).
	Market competition and economic stress	"In many instances, management representatives are present in private retail pharmacies, actively promoting business. Given the abundance of pharmacies, patients can easily obtain the same medications from other sources. The profits of private retail pharmacies remain a significant concern." (G2R5).

Theme	Subtheme	Formulated Meanings
Lack of diligence	**Physician**	
	Patient insistence on self-medication	"While many cases involve referrals to dermatologists, some patients insist on receiving prescriptions directly from their general practitioners. Unfortunately, a significant number of these prescriptions involve combination products that contain topical steroids." (G1R8).
	Pharmacist	
	Meeting customer demand	"In certain cases, we dispense TCs based on old prescriptions. However, when such requests are declined, patients often do not return for further medicine purchases, resulting in reduced sales." (G2R1).
Confront the challenge	**Physician**	
	Addressing a major challenge in the healthcare system	"Despite resource limitations in peripheral areas, there is room for more rational prescription practices. In the future, regulatory changes will address these issues and improve the prescription practices." (G1R3).
	Continuing Medical Education (CME)	"Among dermatologists, there are CMEs and conferences specifically dedicated to TCs use. In the dermatology department, we typically have at least one session that focuses on TCs use." (G1R1) "In other departments, there exists a knowledge gap. To address this issue, awareness programs are essential, especially for students, interns, and postgraduates." (G1R2).
	Pharmacist	
	Strict enforcement of regulations	"To overcome the above limitations, the regulation must be strictly enforced, or stringent amendments to the D&C rule may be beneficial." (G2R3).
	Comprehensive education and training programs	"As part of our CME, we have actively participated in various training programs. However, it is worth noting that we have not encountered any specific programs that focus on the rational use and adverse effects of TCs." (G2R4). "To address this knowledge gap, I recommend incorporating training sessions specifically dedicated to TCs use." (G2R2).

G1: FGD Physician's Group, G2: FGD Pharmacist's Group, R1-8: Respondent 1-8

regulatory laxity and economic pressures, significantly influence TC usage practices. The enforcement of prescription-only policies for TCs remains inconsistent, enabling their OTC availability. This undermines efforts to promote rational use and exacerbates the misuse problem. Economic pressures on pharmacists, particularly those in private retail settings, create an environment where business priorities often override ethical considerations. Physicians noted similar challenges in peripheral areas, where resource constraints and patient demands lead to suboptimal prescribing practices. Collaboration between physicians and pharmacists is another critical area requiring attention. The lack of standardized protocols for TC prescribing and dispensing contributes to inconsistent practices and messaging. Regular inter-professional communication and training sessions could address this gap, ensuring a more unified approach to patient care.

CONCLUSION

This study underscores the pressing need to address gaps in the knowledge and practices of community pharmacists and physicians regarding TCs. While healthcare providers demonstrate substantial knowledge of TCs, challenges such as economic pressures, regulatory laxity, and patient misconceptions hinder their ability to promote rational use. Enhanced education, stricter regulations, and collaborative efforts are imperative to mitigate misuse and improve patient outcomes. These findings provide a foundation for designing interventions to ensure the safe and effective use of TCs in similar settings.

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ABBREVIATIONS

ADRs: adverse drug reactions; **CME:** continuing medical education; **CTRI:** Clinical Trials Registry-India; **CVI:** content validity index; **CVR:** content validity ratio; **D&C Act:** Drugs and Cosmetics Act; **FGDs:** focus group discussions; **G1:** Focus Group Discussion Physician's Group; **G2:** Focus Group Discussion Pharmacist's Group; **GMCK**: Government Medical College Kannur; **IEC:** Institutional Ethics Committee**; NGSM:** NGSM Institute of Pharmaceutical Sciences; **OTC:** over-the-counter; **R1-8:** Respondent 1-8; **TCs:** topical corticosteroids.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORS CONTRIBUTION

Study conception and design: Sreeraj Kandoth, Narayana Charyulu Rompicherla, Sarath Chandran Chadrashekar Shenoy, Uday Venkat Mateti and Sarin Shyamala Mohanan; data collection: Sreeraj Kandoth; analysis and interpretation of results: Sreeraj Kandoth, Sarath Chandran Chadrashekar Shenoy, Narayana Charyulu Rompicherla, Juno Jerold Joel and Sarin Shyamala Mohanan; draft manuscript preparation: Sreeraj Kandoth, Narayana Charyulu Rompicherla, Juno Jerold Joel, Uday Venkat Mateti and Sarin Shyamala Mohanan. All authors reviewed the results and approved the final version of the article.

SUMMARY

This qualitative study explored the knowledge, perceptions, and practices of physicians and community pharmacists regarding the use of TCs, aiming to identify factors contributing to their irrational use. Two FGDs were conducted separately with eight physicians and eight pharmacists, using validated FGD guides. Thematic analysis revealed four major themes: knowledge–practice gap, irrational use, ADRs, and systemic challenges. Physicians demonstrated strong understanding of TC potency, classifications, and appropriate applications, but reported limited time to effectively translate this knowledge to patients, contributing to gaps in patient awareness. Pharmacists were aware of prescriptiononly regulations but faced difficulties adhering to them due to customer pressure and competitive market dynamics. Both groups highlighted widespread patient misuse of highpotency TCs. Commonly reported ADRs included skin atrophy, telangiectasia, hypopigmentation, and tinea incognito, with pharmacists expressing limited training in ADR identification. Systemic issues such as inadequate regulatory enforcement, economic pressures, and insufficient professional training further contributed to irrational TC use. The findings underscore the need for strengthened regulations, targeted educational interventions, and improved collaboration between physicians and pharmacists to promote the rational and safe use of topical corticosteroids.

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