PCR72

Assessing the Adherence of Treatment Modalities in Psoriasis- A Systematic Literature Review

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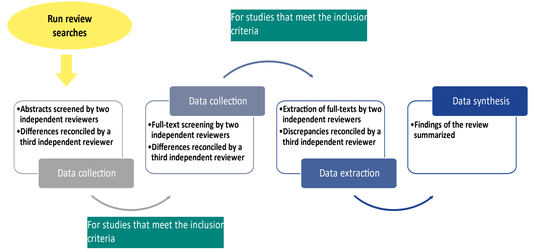
Background

This systematic literature review (SLR) is aimed to evaluate the rates of treatment adherence and explore the reasons for non-adherence among patients with psoriasis. Psoriasis is a chronic, immune-mediated inflammatory skin disease characterized by the formation of red, scaly plaques. While there are several treatment options available for psoriasis management, including topical therapies, phototherapy, systemic oral therapy, and biologics, long-term adherence to these treatments is not well established. Hence, this SLR was conducted to gain insights into the adherence rates and factors contributing to non-adherence in individuals with psoriasis.

Methods

- EMBASE® database was searched from database inception until December 2023 using a search strategy that included different combinations of keywords such as "psoriasis", "treatment adherence", and "medication adherence"
- The study screening process involved two independent reviewers who manually screened all citations in the first screening process based on the title and abstract. They identified a list of potentially relevant studies
- After the first screening, the full texts of relevant studies were examined in more detail by the same two reviewers to determine a final list of included studies eligible for inclusion in the systematic literature review (SLR). A third independent reviewer resolved any discrepancies in their decisions at first and second screening level
- The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were followed to identify studies assessing adherence in psoriasis
- For each identified article, the following outcomes were extracted: the method employed to measure adherence, the observed adherence rate, and the reported reasons for non-adherence

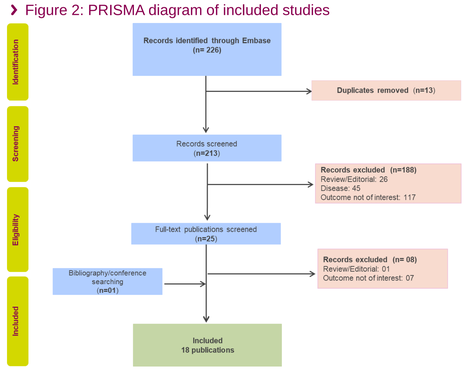
Figure 1: Study selection methodology for systematic literature review



Results

A total of 226 studies were retrieved using electronic literature searches conducted over Embase. After removing 13 duplicates, 213 unique records were screened based on title and abstract. Primary screening excluded 188 records, leaving 25 articles for full-text screening. An additional record was retrieved from bibliography and conference searching. Full-text screening resulted in the exclusion of 8 records, leaving 18 studies that met the inclusion criteria and were included in the current review (Figure 2).

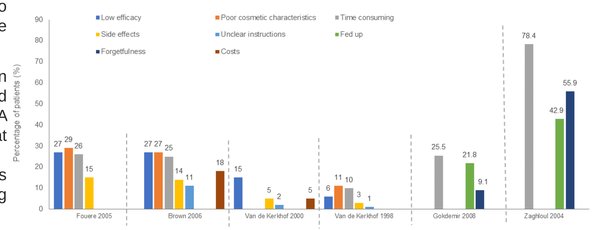
Figure 2: PRISMA diagram of included studies



Findings

- A total of 18 studies were included that assessed adherence of treatment modalities in psoriasis
- Adherence of different therapies were assessed. Topical therapy (44.3% to 72%) had lowest rate of adherence followed by oral agents (81% to 95.4%), phototherapy (60.7% to 93%) and biologics (83.6% to 100%)
- Among 18 studies, six studies reported reasons of topical therapy nonadherence. Lower adherence rates to topical medications can be attributed to various factors including limited effectiveness (6% to 27%), unfavorable cosmetic characteristics (11% to 29%), time-consuming application (10% to 78.4%), side effects (3% to 15%), unclear instructions (1% to 11%), dissatisfaction (21.8% to 42.9%), high costs (5% to 18%), and forgetfulness (9.1% to 55.9%) (Figure 3).

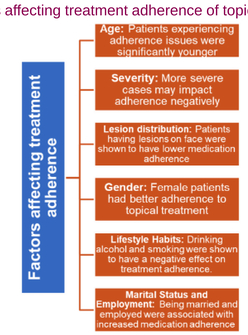
Figure 3: Reasons of low adherence to topical medication



Factors affecting topical therapy adherence

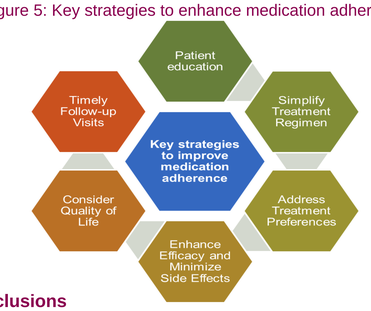
- Various factors have been identified that influence treatment adherence to topical medications in psoriasis patients
- Lower adherence rates were observed in younger patients, those with more severe cases of psoriasis and with lesions present on face. On the other hand, higher adherence rates were associated with female gender, being married, and having employment
- Lifestyle habits, such as alcohol consumption and smoking, were found to negatively impact adherence. These factors highlight the importance of considering individual characteristics and behaviors when developing strategies to improve adherence to topical medications in the management of psoriasis. (Figure 4)

Figure 4:Factors affecting treatment adherence of topical therapy



To enhance adherence to topical medications in psoriasis patient's key strategies include:
1.Provide comprehensive patient education about the treatment, its benefits, and potential side effects to increase understanding and compliance.
2.Simplify the treatment regimen by reducing complexity, frequency, and providing clear instructions to make it easier for patients to incorporate into their daily routine
3.Address individual treatment preferences, involving patients in shared decision-making to align therapy with their lifestyle and preferences
4.Optimize efficacy while minimizing side effects through regular assessment, dosage adjustments, and prompt management of adverse reactions
5.Consider the impact on quality of life, recognizing the physical and emotional well-being of patients, and finding a balance between disease management and maintaining an overall satisfactory quality of life
6.Schedule timely follow-up visits to evaluate progress, address concerns, and make necessary adjustments, providing reminders and accountability for patients
Implementing these strategies can contribute to improving adherence to topical medications, leading to better treatment outcomes and effective psoriasis management (Figure 5)

Figure 5: Key strategies to enhance medication adherence



Conclusions

Based on the results of the systematic literature review (SLR) on treatment adherence in psoriasis, it can be concluded that topical therapy has the lowest rate of adherence compared to other treatment modalities such as oral agents, phototherapy, and biologics. The adherence rates observed in the studies for topical therapy ranged from 44.3% to 72%, while adherence rates for oral agents ranged from 81% to 95.4%, for phototherapy ranged from 60.7% to 93%, and for biologics ranged from 83.6% to 100%.

Multiple factors were presented in the six studies focusing on topical therapy, which likely contribute to the lower adherence rates observed in this treatment modality. Unfortunately, the other studies assessing adherence did not provide reasons for non-adherence to treatment.

The significant difference in adherence rates among the various therapies highlights the importance of considering adherence when prescribing these treatments. The adherence rates for biologics, ranging from 83.6% to 100%, indicate a clear preference of patients for these therapeutic options.

These findings would emphasize that healthcare providers should carefully evaluate and address the factors contributing to the lower adherence rates in topical therapy. These factors may include the inconvenience of frequent application, perceived lack of efficacy, unpleasant side effects, and difficulties with the application process.

Moreover, the high adherence rates observed for biologics highlight the need for healthcare professionals to consider patient preferences when selecting a treatment approach. It is essential to balance the efficacy and safety profiles of different treatments with patient adherence and preferences to optimize the management of psoriasis.

Further research could explore interventions and strategies that may improve adherence to topical therapy, helping to enhance treatment outcomes for patients. Additionally, investigating the reasons for high adherence rates with biologics could provide valuable insights into patient motivations and preferences, facilitating shared decision-making between healthcare providers and psoriasis patients.

In conclusion, the SLR findings indicate that topical therapy has the lowest adherence rates among the assessed treatments for psoriasis. The identified factors contributing to this lower adherence underscore the need for healthcare professionals to consider patient preferences and address these factors when prescribing treatments. The high adherence rates observed for biologics suggest a clear preference of patients for this treatment modality, further highlighting the importance of individualized care in psoriasis management.

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