

Melasma on Screen: The Role of YouTube in Educating Arabic-Speaking Patients in Morocco

Background

Melasma is a prevalent pigmentary disorder, particularly in regions like Morocco, where sun exposure and cultural practices play significant roles. Social media platforms such as YouTube are increasingly used to seek information about melasma treatments, but the accuracy, safety, and cultural influences of this content remain concerning.

Objective

This study aimed to analyze the first 50 YouTube videos retrieved by the Arabic search term "علاج الكلف" (melasma treatment) to evaluate their educational value, treatment claims, persuasion methods, and audience engagement, with a focus on identifying potential misinformation and cultural misconceptions.

Methods

Videos were identified using private browsing to avoid algorithmic bias. A structured exploitation sheet was used to classify videos by type (tutorial, testimonial, educational), speaker characteristics (gender, profession, Arabic dialect), and treatment recommendations (natural, medical, preventive). Content was analyzed for differentiation between melasma types (epidermal, dermal, mixed), physiopathology explanation, prevention advice, and commercial partnerships. Viewer comments were also evaluated to assess sentiment, engagement trends, and cultural influences, based on the first 10 comments of each video.

Results

- **Video Characteristics:** Tutorials (44%) and testimonials (42%) were predominant. Male presenters achieved higher average views despite women being the primary speakers (62%).
- **Treatment Trends:** Natural remedies were the most promoted (40%) and garnered the highest engagement, with substances like **apple cider vinegar** and **lemon juice** often applied in unsafe proportions. Medical remedies, such as **topical steroids** and **hydroquinone**, were presented without adequate warnings about their risks, with some glorifying adverse effects like **induced rosacea** and **cushingoid appearance**.
- **Religious and Cultural Misconceptions:** Many videos perpetuated **religious beliefs**, with melasma attributed to **acts of witchcraft** or supernatural causes, further stigmatizing the condition.
- **Comments Analysis:** Of the analyzed comments, **76% shared success stories**, 24% sought advice, 10% expressed concerns, and only 4% mentioned adverse effects. Additionally, **84% of comments reflected cultural or religious influences**, and the majority (87%) were from women.
- **Neglect of Professional Advice:** Only 14% of videos emphasized the importance of **dermatological consultation**, highlighting a gap in promoting professional care.

Conclusion

YouTube videos on melasma treatments reflect a concerning mix of educational, misleading, and culturally influenced content. The widespread use of unregulated natural remedies and the glorification of harmful medical treatments, combined with religious misconceptions,

underline the urgent need for regulation of digital health content. Furthermore, there is a critical need for **Arabic-speaking dermatologists** to engage with social media platforms and provide evidence-based, culturally sensitive education to counter misinformation and guide patients safely. Strengthening digital health regulations and promoting professional expertise in online spaces could mitigate the risks associated with misinformation and improve public health outcomes.