



Debunking Misinformation: Analyzing Alopecia Areata Claims on Social Media

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INTRODUCTION

- Alopecia Areata (AA) is an autoimmune disease prevalent in 2% of the worldwide population that affects both men and women from a range of ethnic backgrounds.¹
- The physical presentation of AA includes noncicatricial or non-scarring hair loss that maintains the hair follicle and the potential for regrowth.²
- The disease impacts the psychosocial well-being of diagnosed patients and causes social discrimination and impairment from negative public associations of hair loss with poor health.
- In response to their diagnosis, patients tend to seek medical advice from social media influencers and their content for treating their condition outside of their healthcare provider or prior to their first consultation.³

OBJECTIVES

- To review the accuracy of the information about AA on social media posts provided by social media influencers.
 - It is hypothesized that social media influencers may provide alopecia treatment recommendations that do not address AA specifically.
 - We also hypothesize that social media influencers may be recommending AA treatments with no medical benefit.

METHODS

- YouTube and TikTok were used to obtain videos using search criteria #alopecia #alopeciaticreatment. Hashtag relevancy was used as search criteria to ensure broadest data parameters.
- American Academy of Dermatology (AAD) or National Alopecia Areata Foundation (NAAF) treatment recommendation standards used to sort data into three categories.
- Data was manually categorized into four categories:
 - Accurate and Medical Data-Backed**
 - Varied and Not Medical Data-Backed**
 - Misinformed and/or false**
 - Other**

RESULTS

YouTube

- The majority of YouTube videos (73.3%) related to #alopecia and #alopeciaticreatment searches did not address AA treatment specifically.
- 26.6% of videos that addressed AA treatment were mostly Accurate and Medical Data-Backed (19.1%) treatments.
- 7.5% of the videos were Varied and not largely Medical Data-Backed
- No videos identified as Misinformed and/or False

Results

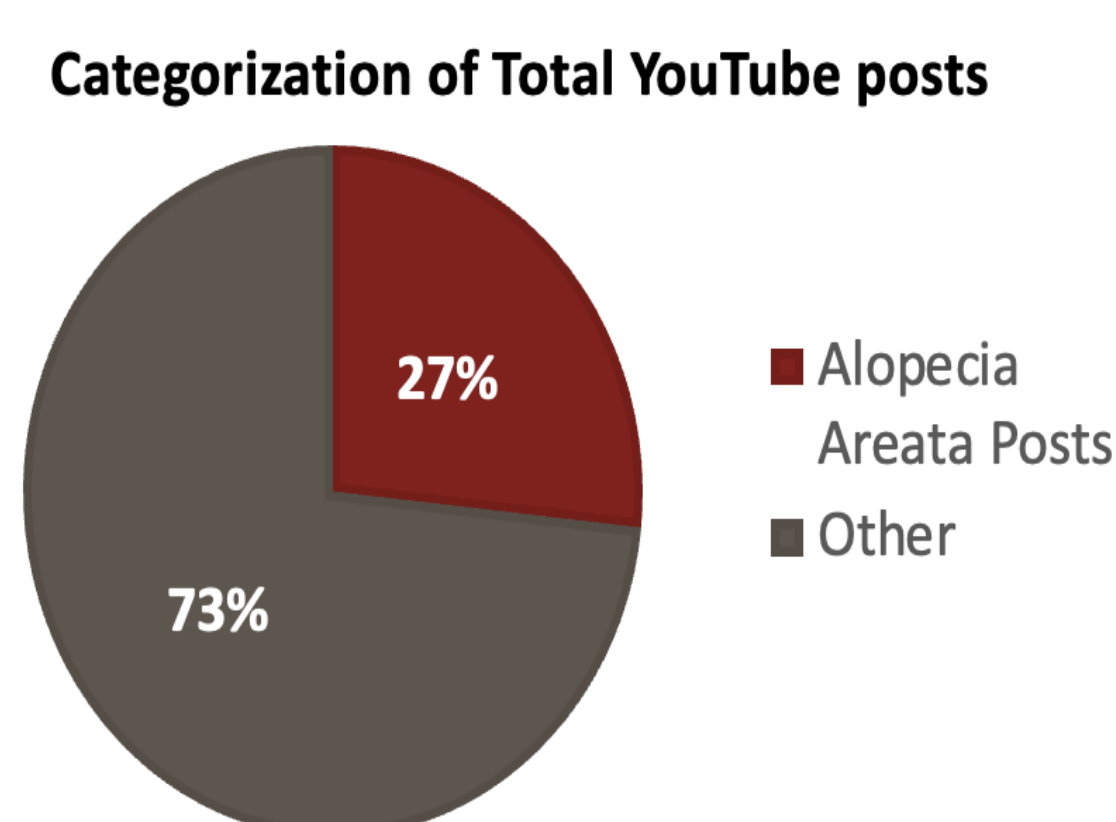


Chart 1: Categorization of 120 YouTube video posts with the tags #alopecia and/or #alopeciaticreatment

Results

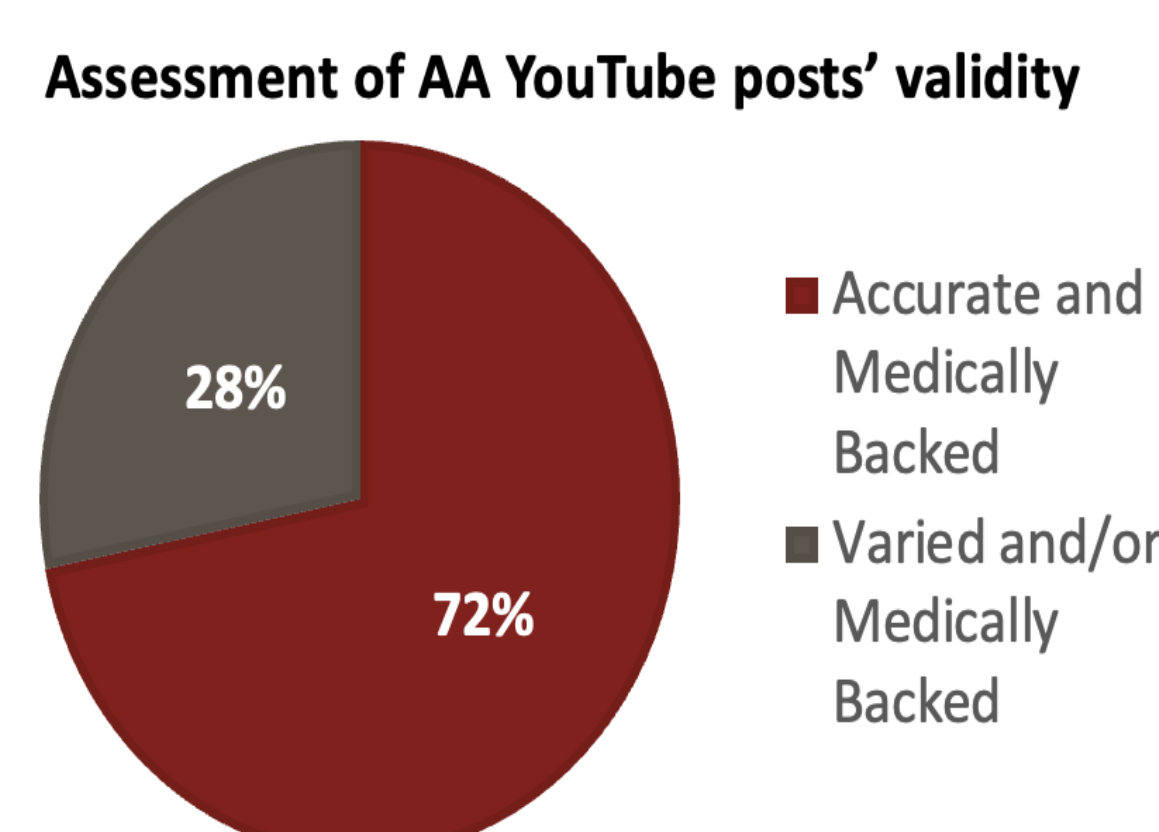


Chart 2: Categorization of 32 YouTube videos addressing AA treatment

Results

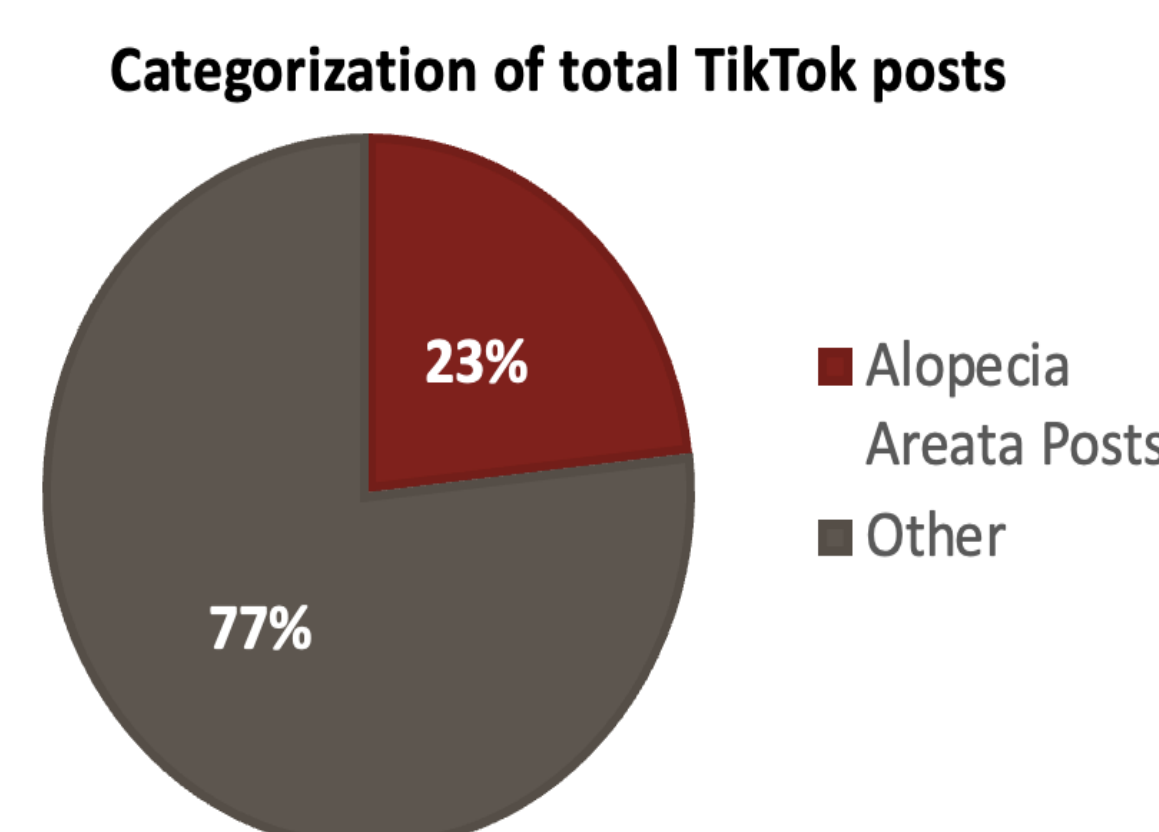


Chart 3: Categorization of 269 TikTok video posts with the tags #alopecia and/or #alopeciaticreatment

Results

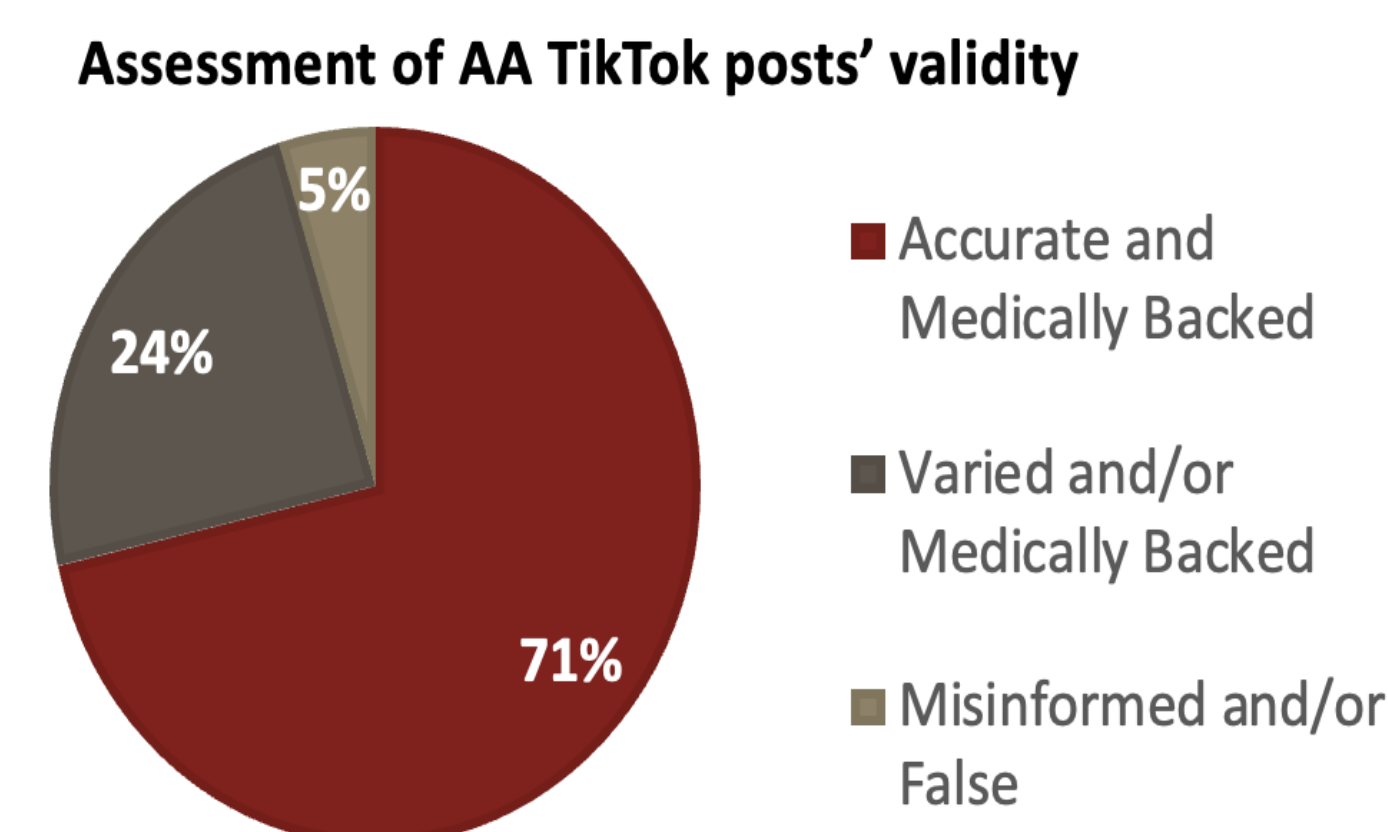


Chart 4: Categorization of 63 TikTok videos addressing AA treatment

TikTok

- 269 TikTok videos were analyzed with 77% were classified as "Other" and did not address AA treatment.
- 23% percent of the videos specifically addressed AA treatment.
- 71%, 24%, and 5% of AA TikTok videos were categorized as Accurate and Medical Data-Backed, Varied and Not Medical Data-Backed, and Misinformed and/or False respectively.

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- Gupta, A. K., Ravi, S. P., & Wang, T. (2024). Alopecia areata and pattern hair loss (androgenetic alopecia) on social media – Current public interest trends and cross-sectional analysis of YouTube and TikTok contents. *Journal of Cosmetic Dermatology*. <https://doi.org/10.1111/jocd.15605>

DISCUSSION

- Healthcare professionals must understand the extent of AA misinformation that patients view on social media.
- Most of the videos addressing AA recommend the standard appropriate treatment(s).
- Varied and/or not Medical Data backed information could prove misleading to patients as social media influencers may sell their own products for profit.
- Patients may follow treatment guidance for other types of alopecia and potentially worsen AA hair loss.
- Healthcare professionals can counteract misinformation by creating effective, viral social media posts and informational flyers in clinic.
- Chatbots such as ChatGPT must be developed with the most accurate treatment outputs about AA.

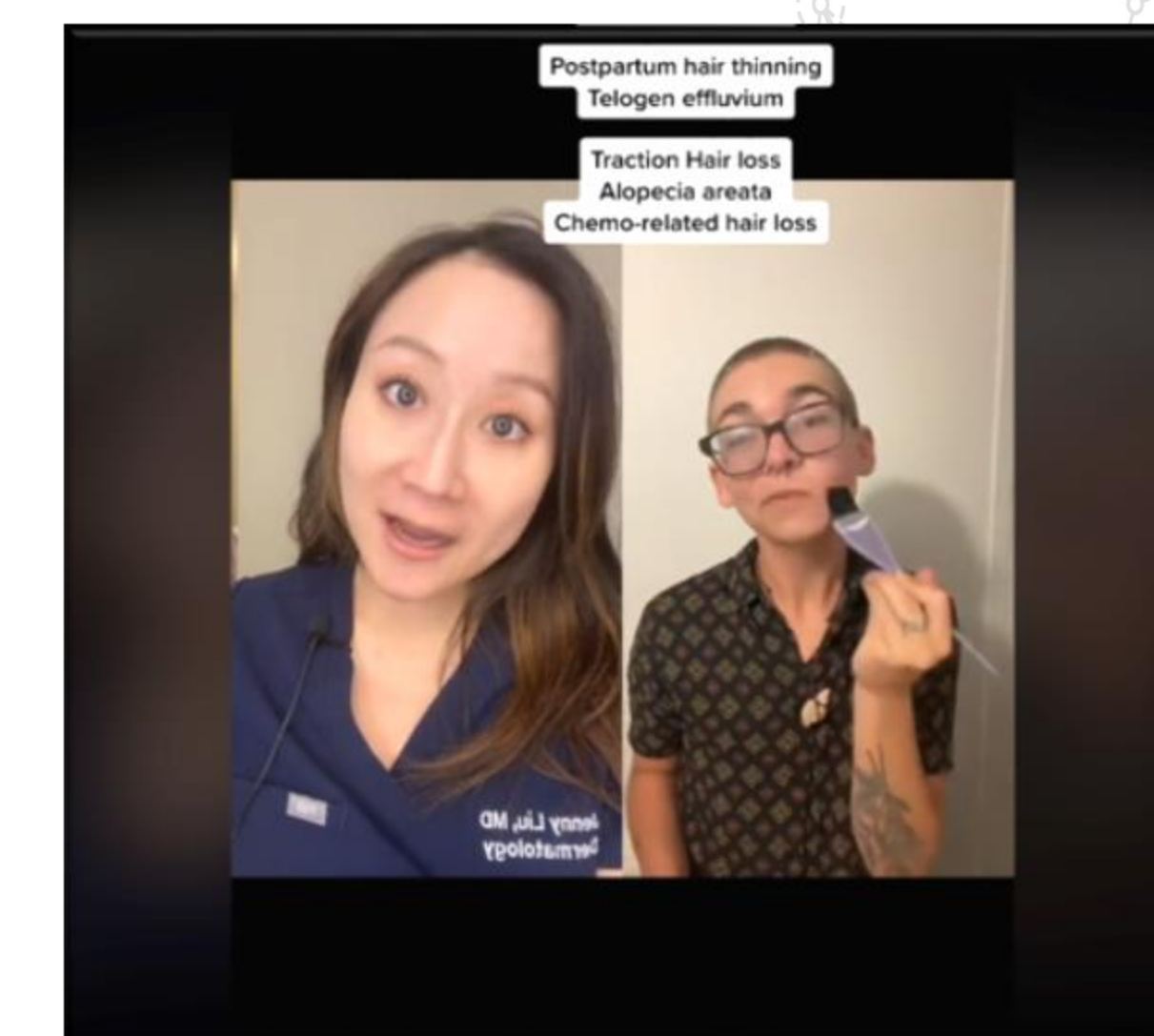


Image 1: Video clip of Accurate and Medical Data-Backed treatment recommendation of Minoxidil for AA by YouTube dermatologist influencer.

Limitations:

- Study data did not include non-video social media such as Reddit and limited hashtag searches could have also included #alopeciaticure.

Future studies should investigate:

- If AA patients follow physician treatment guidance or seek out social media influencer advice due to healthcare access barriers or patient-physician mistrust.
 - AA community building support available and sought out by patients in the video posts.

CONCLUSION

- AA remains a hair loss condition of great physical concern and social limitation to patients.
- Most AA treatment videos do not specifically address treatment for the disease.
- Healthcare stakeholders must ensure that the social media platforms and AI chatbots are used as tools of proactive education to combat any AA misinformation.

ACKNOWLEDGEMENTS

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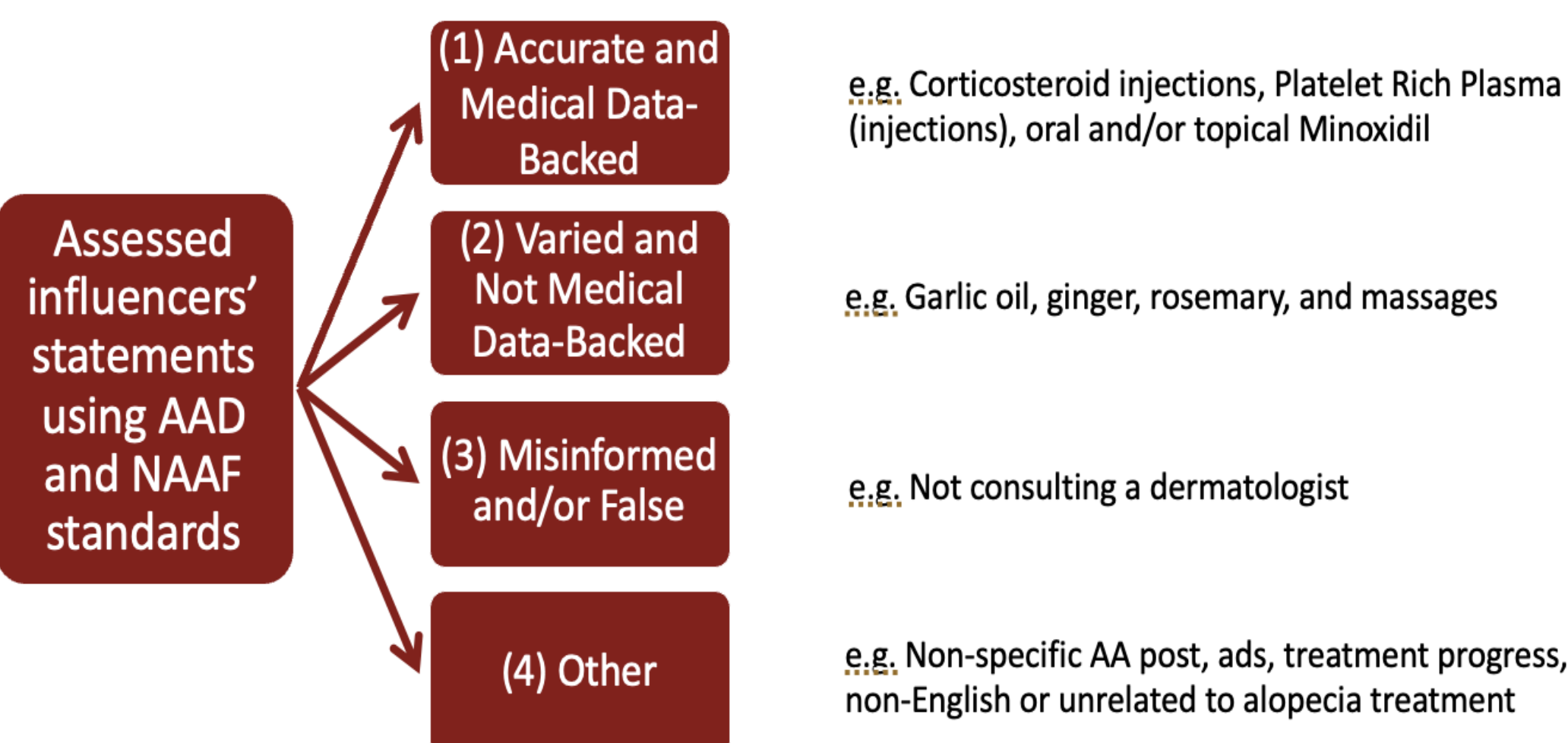


Illustration 1: Four AA treatment categories and corresponding examples.