

# Personalizing Acne Care to Improve Clinical Outcomes and Compliance



## Acne has profound effects on patients physically and psychologically.

Acne is the most common inflammatory dermatosis seen by Dermatologists with profound effects on patients both physically and psychologically.<sup>1</sup> Although extensive research and evidence-based guidelines exist for treatment, most are based on short term randomized controlled trials, leaving a gap in understanding the longer-term impact of the disease on patient quality of life.<sup>2</sup>

It has been shown that patients with moderate-to-severe acne suffer from poor body image, low self-esteem and experience social isolation and constriction of activities.<sup>3-4</sup> Acne is also strongly associated with feelings of anxiety, depression, anger, less satisfaction with the body and lower self-worth.<sup>5-8</sup>



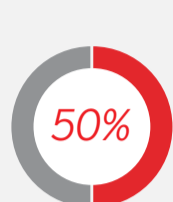
*In the first year following an acne diagnosis, patients have a 63% greater risk of developing depression compared to patients who do not have acne.<sup>9</sup>*

## Despite emotional impact, compliance is low.

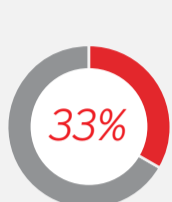
Yet despite the emotional impact acne has on patients, adherence to acne treatment plans is surprisingly low (in 1 study, 27% of patients didn't even fill their prescription).<sup>10</sup> Barriers that impact treatment adherence include lack of education about acne and its causes, adverse events associated with acne treatments, and complex treatment regimens.<sup>11</sup>



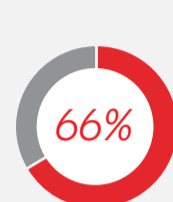
## In a study of patients with acne, 38% of non-adherence was due to side effects, with the following discontinuation rates by treatment type:<sup>\*12</sup>



with retinoids only



with benzoyl peroxide combinations



with retinoid combinations

\*45.6% of patients discontinued treatment for any reason.

## An international panel of experts recommends strategic use of OTC skincare to promote adherence by improving tolerability.<sup>13</sup>

## New research reveals the importance of dialoguing with acne sufferers.

To better understand the psychological profiles of acne sufferers, focus groups were conducted with 104 patients aged 13 to 45 years to learn more about their perception of acne and the impact it has on their daily life.<sup>14</sup>



## Patients were asked "What is the worst thing about having acne?"

Natural language processing and machine learning methods were used to identify linguistic patterns depending on age and gender.

### Results:<sup>14</sup>



Mainly mentioned physical aspects of acne including pain, skin blemishes and scarring

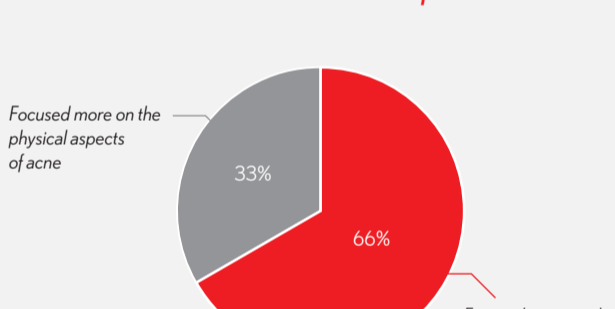


Were strongly concerned about their appearance and felt insecure and embarrassed



Felt acne breakouts were hard to manage and were the reason for avoiding public events and social activities

## Teens focus more on emotional aspects of acne



66% of teenagers aged 13-17 (56% of boys) focused on the emotional aspects of acne such as higher insecurity, etc., while 33% (76% of girls) focused more on the physical attributes of the disease such as discomfort, pain, and scarring.

Female teenagers reported more "sadness", while male teenagers used more angry words. This difference appears to decrease with age.

## Among all ages and genders there is no clear definition of acne.



Medical terms such as hyperpigmentation or scarring are not well understood.



Regarding treatment and efficacy expectations, women appeared to be more involved and more patient to see efficacy than men.



The greatest predictor of anxiety for all was of social focus rather than health.

## Conclusion:

The difference in linguistic patterns in this study suggests the need for personalization for better impact. Moreover, increasing education and broadening the health focus could help in decreasing patient anxiety. Patients who focused on the social aspects of acne breakouts tended to be more anxious than patients in the other categories; therefore, it is important to make recommendations that may help reduce their anxiety, in addition to treating their acne.

## PACE panel recommends personalized care.<sup>15</sup>

New recommendations from the PACE (Personalizing Acne: Consensus of Experts) Panel focus on how acne care can be personalized to address individual patient concerns, expectations and goals, providing a clinical 'road map' to help doctors manage their patients acne better, and improve patient outcomes.



During acne consultations, patients and physicians should discuss long-term treatment expectations, giving consideration to potential sequelae (eg, scarring), which can be prevented with early, effective intervention.



Treatment goals should be personalized depending on the specific regional impact of acne; the impact of truncal acne is distinct vs facial acne, and should be assessed independently.



Patient discussions should include use of cosmetics, moisturizers, hair products and sunscreen, while choice of/transitions between treatments should be influenced by factors including specific burden of disease and treatment tolerability.



Patients likely to require additional considerations include children <10 years, patients with darker skin phototypes, and women who are pregnant/breastfeeding.



Specific populations may benefit from interdisciplinary management. To optimize comprehensive, patient-centered acne care, physicians could discuss disease burden, treatment goals, long-term treatment expectations, and specific factors related to the patient and their lifestyle.

*The psychological state of the acne sufferer is critically important for achieving treatment success. It has the potential to change the lens through which the disease is observed and to refocus the mind from the state of anxiety towards improvement of health and ultimately a better disease outcome.*

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