sunscreen, and more likely to use tanning beds.[3] Similarly, our study found that white Hispanic individuals wore hats and sunglasses significantly less frequently than their non-Hispanic counterparts. To our knowledge, our study is the first to identify a relationship between skin cancer QoL and ethnicity, and better understanding of this observation is needed. Overall, white Hispanic participants were less knowledgeable about skin cancer risks and suffered worse QoL after NMSC diagnosis (Fig 1), suggesting the need for targeted patient education initiatives to bridge ethnic disparities regarding skin cancer knowledge and, ultimately, improve QoL among Hispanic individuals with skin cancer.

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The bandwagon effect increases acne treatment willingness in teenagers

To the Editor: Many teenagers struggle with initiating acne medications.[1] Common marketing techniques use the bandwagon effect to persuade consumers. The bandwagon effect is a psychological phenomenon in which individuals follow a particular trend because of the desire to conform to the masses.[2] Many teenagers want to fit in among their peers and make decisions based on this idea.[3] Moreover, the popularity of a treatment may be an indicator that the treatment is effective.[4,5] We hypothesized that teenagers would be more likely to report willingness to initiate an acne treatment after being presented with a bandwagon statement along with clinical data rather than just clinical data alone.

After institutional review board approval, an online survey was performed by 80 participants 18 to 19 years old, with a working knowledge of English and self-reported diagnosis of acne. Participants were recruited through Amazon Mechanical Turk, an online platform extensively used by psychologists for participant recruitment. The survey was completed in Qualtrics (Provo, UT), a secure Web-based survey software that supports data collection.

Participants were randomly assigned in a 1:1 ratio to assess willingness to take treatment for acne if presented with clinical data alone (n = 40) or clinical data accompanied by a bandwagon-based statement (n = 40) (Table I). Scores were recorded on a 10-point Likert-type scale and were evaluated using 1-way analysis of variance, 2-group *t* tests, and chi-square tests.

The 2 groups' baseline characteristics were similar (Table II). Compared with participants presented with only clinical data (mean, 5.8; standard deviation, 2.8), subjects presented with clinical data and a bandwagon-based statement reported greater willingness to take treatment (mean, 7.8; standard deviation, 2.1; $P = .001$) (Fig 1). More participants were nearly completely or completely willing to take treatment (score of 9 or 10) in the bandwagon group (20%) than in the clinical data group (8%; $P = .02$). Additionally, more participants were nearly unwilling or completely unwilling to take treatment (score of 1 or 2) in the clinical data group (9%) than in the bandwagon group (1%; $P = .02$).

Presenting acne medication along with a bandwagon-based statement increased teenagers' reported willingness to take treatment, decreased the likelihood that a teenager was nearly completely or completely unwilling to take treatment, and increased the chances of teenagers being nearly

Table I. Survey questions for presentation of treatment for acne*

Question 1 (control)
With 3 months of consistent use, an acne medication has an 80% chance of helping your skin become clearer. The medication is given via topical application every day and is associated with excessive dryness of the skin, peeling, and/or increased sun sensitivity.
How willing would you be, on a 1 (not willing) to 10 (completely willing) scale, to take this medication for your acne?
Question 2 (bandwagon effect)
With 3 months of consistent use, an acne medication has an 80% chance of helping your skin become clearer. The medication is given via topical application every day and is associated with excessive dryness of the skin, peeling, and/or increased sun sensitivity. This medication is the most popular among teenagers and young adults for the treatment of their acne.
How willing would you be, on a 1 (not willing) to 10 (completely willing) scale, to take this medication for your acne?

*Responses were recorded on scale from 1 (not willing) to 10 (completely willing).

Table II. Summary of baseline characteristics and demographic information

Variable	Clinical data group (n = 40)	Bandwagon group (n = 40)
Patients		
Age, y, mean ± SD	18.5 ± 0.5	18.5 ± 0.5
Male sex, n (%)	24 (60)	24 (60)
Currently taking medication, n (%)	17 (43)	24 (60)
Ethnicity (%)		
White	22 (55.0)	19 (47.5)
Black	3 (7.5)	4 (10.0)
Hispanic or Latino	5 (12.5)	9 (22.5)
Native American	0 (0)	0 (0)
Asian or Pacific Islander	9 (22.5)	8 (20.0)
Other	1 (2.5)	0 (0)
Education level (%)		
No schooling completed	1 (2.5)	1 (2.5)
High school graduate	35 (87.5)	36 (90.0)
Bachelor's degree	4 (7.5)	3 (7.5)
Master's degree	0 (0)	0 (0)
Professional degree	0 (0)	0 (0)
Doctorate degree	0 (0)	0 (0)

SD, Standard deviation.

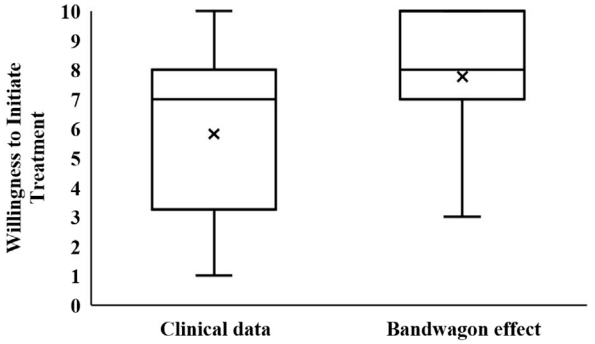

Fig 1. Presenting treatment with a bandwagon statement improves teenagers' willingness to initiate treatment for acne. Subject mean willingness to take treatment in the clinical data and the bandwagon statement groups were 5.8 and 7.8, respectively. Boxes depict 25th and 75th quartiles. Error bars indicate maximum and minimum scores. Median scores are depicted as the horizontal line in each box, while mean scores are indicated by the "X" in each box.

completely or completely willing to take treatment. The bandwagon effect may take advantage of teenagers' desire to fit in with their peers or may increase their sense of the treatment's effectiveness.[3-5] These 2 motives are referred to in psychology as *normative social influence* (conforming to fit in) and *informational social influence* (conforming to be right).[4,5]

Our study included only participants 18 and 19 years old and may not be generalizable to other ages. We did not capture previous acne treatment. Our survey assessed reported willingness; how well this correlates with behavior is not well characterized. The findings suggest that providing patients with a bandwagon-based statement may be a simple and cost-effective technique to improve patient outcomes for teenagers who have acne.

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Mucocutaneous adverse effects of the genital and perianal skin from isotretinoin therapy

To the Editor: Mucocutaneous adverse effects from isotretinoin therapy are common and dose dependent. Cheilitis and xerosis are frequently reported and routinely monitored. Adverse effects such as dermatitis, fissures, and bleeding affecting the genital and perianal skin are, however, uncommonly reported in the literature.[1-4] Consequently, they may not be pointed out to patients by clinicians. In a questionnaire-based study, we evaluated the presence of these symptoms in a cohort of patients receiving care in our department. Ethics approval was obtained. Inclusion criteria included age older than 16 years and a minimum of 3 months of isotretinoin treatment.

Eighty patients completed the questionnaire from April 2017 through July 2017. Fifty were female. The average age of respondents was 24 years (range, 17-48 years). The average dose at the time of completion of the questionnaire was 0.7 mg/kg (range, 0.2-1 mg/kg), with an average cumulative dose of 6 g (range, 1.68-14.4 g).

Of the female respondents, 40 (80%) reported being sexually active. Sixteen patients (32%) reported vulval dryness on treatment, resulting in vulval discomfort in 11 (22%). Ten (20%) patients reported dyspareunia, leading to the avoidance of intercourse in 8. Nine (18%) patients reported intermenstrual bleeding, of whom 3 also reported intracoital bleeding. Five (10%) patients reported vulval fissures, and 12 (24%) reported the new or increased need for lubricating agents. Of 20 patients who reported any vulvovaginal symptoms, 18 had responded that they were sexually active. Sixteen of 80 (20%) patients reported perianal dermatitis, 21 (26%) reported fissures, and 16 (20%) reported perianal bleeding on treatment. Fourteen female and 8 male patients had reported a pretreatment history of dry skin and/or eczema.

With multiple linear regression modeling, a preexisting diagnosis of dry skin and/or eczema did not seem to confer an increased risk for the development of these symptoms. There was a causal association between higher daily doses (>50 mg) and cumulative doses (>6000 mg) and incidence of vulval dryness, vulval fissures, and perianal dermatitis and between higher doses and perianal fissures and bleeding (but not higher cumulative doses). However, further analysis of these associations in larger numbers is required.

Mucocutaneous adverse effects from isotretinoin result from the shrinkage of sebaceous glands, increased transepidermal water loss, skin barrier dysfunction, and abnormal epidermal lipid production. Sebaceous glands, occurring on both hair-bearing and glabrous genital skin, have an important role in lubrication and protection, as well as in wound healing. Isotretinoin therapy leads to xerosis and increased skin fragility and susceptibility to injury from frictional forces. The findings of our study suggest that symptoms relating to these effects on genital and perianal skin are common. Limitations of this study, however, include small numbers, subjective reporting of symptoms without examination, and no assessment of other potential contributing factors or etiologies. It is our experience with prescribing isotretinoin, as can be the case with other dermatoses that can affect the genital skin, that patients often do not voluntarily report such symptoms.[5] Given the nature of these symptoms and an