



# CALIFORNIA STATE SCIENCE FAIR 2013 PROJECT SUMMARY

<b>Name(s)</b> <b>Lucas G. Kurlan</b>	<b>Project Number</b> <b>J0413</b>
<b>Project Title</b> <b>Attitudes on Acne</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> When I began to develop inflammatory acne, my mother insisted on me taking medication to reduce the outbreaks. Initially, I wasn't very receptive; I did not see the need for medication. This led me to wonder about other teenagers with acne; did they share my feelings? I designed a survey to help doctors better treat patients who are overly concerned, as well as those who need to be convinced of the harm of permanent acne scarring to improve compliance. This is a relevant project because 75-80% of all teenagers develop acne, and the scarring may have long-term effects that impact job-chances, among other things later in life.</p> <p><b>Methods/Materials</b> To accomplish this goal, I wrote a survey. A total of 52 acne patients took part. After much editing, I gave the questionnaire to a group of dermatologists to distribute after visits. The survey included 12 questions designed to judge patients' acne concern, objectiveness, influences, and knowledge on acne conditions. The 52 subjects' results were compiled on the basis of race, age, and gender and correlations between questions, which all helped me form my conclusions. With the results, dermatologists might be able to better treat and inform patients who may be at higher risk for non-compliance or unsubstantiated acne fears.</p> <p><b>Results</b> In this study, patients were generally concerned about their acne. Their self-severity ratings were very near to the doctors' opinions of their acne severity. Females visited the dermatologists almost twice as much as males. The media concerned females more (average 7.6) than males (average 4.9) [Newspaper Editorial to Raise Awareness?]. There was a positive trend between acne severity and the patients' concern for acne scarring. Subjects who scored their severity less than 7 had an average scar concern of 6.9, while those who scored their severity equal or greater than 7 had an average scar concern of 8.4. There was a similar trend at a cutoff of 5.</p> <p><b>Conclusions/Discussion</b> I believe doctors should rest assured that patients are objective, but still make sure patients do not overreact about their condition and desire unnecessary treatment. Patients also became more concerned about scarring as their acne severity increased. Teens perceived their parents as being more concerned about their acne as it worsened. All in all, patients who visited the doctor seemed to be concerned about treatment and were objective in acne self-analysis.</p>	
<b>Summary Statement</b> I designed a survey to help doctors better approach & treat patients with acne.	
<b>Help Received</b> Acne patients filled out surveys after visits to dermatology offices; Father, Mother, and Science Instructor Mrs. Hunker helped edit; Dr. Kurlan, Dr. Speelman, Dr. Bradshaw, Mr. Peterson, and Mrs. Anwar distributed the surveys; Father bought some supplies; Dr. Kurlan taught me about acne and helped me	