

evaluated that would be crucial to applicant decision making.¹ We recommend that fellowship programs update their websites because providing more information is critical to improving the recruitment of candidates to their programs, and we hope that this study may serve as a guide for website updating.

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Isotretinoin and iPledge Program patient information video: A new modality that improves patient comprehension



To the Editor: Evidence confirms the lack of readability and comprehension of the current iPledge Program patient educational materials.¹ Today, because patients obtain much of their

information online and through popular websites or social media, it is important to provide them with quality information via these platforms. Unfortunately, there is a diverse range of quality in the currently available online resources. This was highlighted by a recent study by Xiang et al² that evaluated the top 50 most-viewed isotretinoin YouTube videos and graded each video across 5 categories.² The majority of these videos had fair- to poor-quality medical information.² We performed a quality improvement study assessing the benefit of using a physician-directed educational video to improve isotretinoin patient comprehension. This intervention is efficient and provides an easy method to provide detailed patient educational information in an office setting, which is replicable and could be generalized across academic and community dermatology practices.

The study commenced after the University of California San Diego's institutional review board exemption on January 28, 2019 (protocol no. 182107). Patients 15 years of age and older were enrolled at the time of iPledge Program registration by board-certified dermatologists. The dermatologists who were not involved in the creation of this video or this publication provided standard verbal counseling, and 1 of the authors (AM) administered video-based education to patients who did not have any interaction with the physician in the video (available at <https://www.youtube.com/watch?v=kGL77TPrJOU&t=>). Before the delivery of traditional or video-based counseling, each participant was informed that he or she would receive a post-counseling survey. The survey included 10 comprehension questions in addition to questions regarding demographics, level of education, preferred learning style, and personal rating of perceived level of comprehension (Supplemental Materials; available via Mendeley at <https://doi.org/10.17632/tkzfbvh4j5.1>). This survey was developed with the aid of a focus group composed of adult and pediatric dermatologists and a patient with severe acne. Surveys were administered from November 2019 through March 2020. Data were imported into an Excel (Microsoft, Redmond, WA) file and analyzed in April 2020.

This study included 25 patients aged 15 to 32 years (mean age of 23 years), 11 males and 14 females. The average highest level of education for the participants was a college degree. Eleven patients received traditional counseling, and 14 patients received video-based counseling (Table I). A student *t* test showed a statistically significant difference ($P < .0001$) in the two groups, and demonstrated superiority of the video-based educational intervention (Table II).

Table I. Demographics and Comprehension

Key demographics and comprehension	Traditional counseling (n = 11)	Video-based counseling (n = 14)
Mean age, y	20.45	24.92
Sex, n (%)	Male: 5 (45) Female: 6 (55)	Male: 6 (43) Female: 8 (57)
Prior family members prescribed isotretinoin, n	No: 7 Yes: 4	No: 11 Yes: 3
Mean patient self-comprehension rating, scale of 0-10	9.3	9.3
Mean percentage of correct comprehension questions, %	62.7	94.3
Preferred method of receiving information, n (%)	Verbal explanation: 7 (64)	Reading written material: 7 (64)

Table II. Correct responses to comprehension questions*

Comprehension question number and topic	Traditional counseling, % answered correctly	Video-based counseling, % answered correctly
1: Side effects of medication	18	100
2: Sharing of medication	100	100
3: Donation of blood	91	100
4: Moisturization and sun protection	100	100
5: Necessity of obtaining blood work	91	100
6: Frequency of pregnancy testing in female patients who can get pregnant	36	71.4
7: Definition of a teratogen	27	100
8: How to create an iPledge Program account	72	100
9: Requirements to initiate treatment	72	85.7
10: Window of time for female patients to pick up their medication from the pharmacy	18	85.7

*Please refer to the Supplemental Materials (available via Mendeley at <https://doi.org/10.17632/tkzfbvh4j5.1>) to see the full comprehension survey that was administered.

We believe the results of this quality improvement study provide clinicians with a new tool that will appropriately and efficiently counsel patients in a way that improves overall comprehension and may lead to improved outcomes. The results are scalable and could be broadly implemented across community-based practices. Our study had several limitations, including a small sample size and absence of blinding in the video-based intervention group. Another limitation was that the survey used was not a validated tool; however, the results of this quality improvement study will serve as a pilot study for future larger, randomized investigations aimed at validating the survey, including principal component analysis of the survey results.

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