

ASERF Final Report

“Patient Education: Are we getting the message across?”

Introduction

When considering an elective surgical procedure the Internet is often the first place a patient will look for information. In order to provide proper and appropriate care, the comprehension of the procedure by the patient is paramount.

The growth of the Internet has proven to be an unlimited resource for health care education. Patients have the ability to look up specific medical information that they believe pertains to them; likely influencing their decision. It has been shown that around 74% of Americans have access to the internet. In 2005, 54% of adults stated that the internet played a major role as they helped another person cope with a major illness, whereas 40% stated it played a major role as they themselves coped with a major illness. Patients believe that information on the Internet has aided in their understanding of health. A majority also feel that the information they read is true and reliable. With this wealth of knowledge available the patients’ reading ability and comprehension is of concern; do they really understand the decision they are making?

Method

The American Society of Plastic Surgery’s National Clearinghouse was used to identify the two most popular cosmetic procedures performed in the United States. Information regarding these procedures was located on the websites of the ASPS and the ASAPS. A passage was created for each procedure, copied directly from their respective websites, that adequately summarized the procedure. Questionnaires were developed that assessed the patient’s comprehension of the passage as well as his or her highest grade level completed and age. Five questions were developed that for each procedure that were answered by both websites’ passages regarding that procedure. Two questions were developed for each procedure that probed the patient’s understanding of pre-operative indications and general information regarding a procedure that patients should be aware of when presenting to an office for consultation. This included incisions commonly used, reasons for obtaining the procedure, prosthetics used, and the appropriate age at which a procedure should be performed. Three questions were developed for each procedure regarding peri/post-operative complications and outcomes. A final question asked the patient whether they felt as if they understood the procedure after reading the passage. Four passages and four questionnaires were subsequently developed based on the 2 websites and 2 procedures.

A convenience sample was obtained based on patients presenting to the plastic surgery clinic at the University Hospital in Newark, NJ. Each patient was given as much time as they needed to read the passage. The passage was removed and the patient was asked to complete the questionnaire. One point was given for each correct answer and the total was subsequently tabulated.

Results

Breast augmentation and rhinoplasty were identified as the most popular procedure performed in the United States. One hundred patients completed the study, with 25 in each group. A summary of all participants is shown in Table 1. A breakdown of the passages based on breast augmentation between

the ASPS and ASAPS websites is shown in Table 2. There were no significant differences in responses between the websites. A breakdown of the passages based on rhinoplasty between the ASPS and ASAPS websites is shown in Table 3. There were no significant differences in responses between the websites. A post-hoc analysis was performed comparing the patients that had completed 12th grade with those that had not. This is shown in Table 4. No significant difference was found between these groups.

Conclusion

It appears that patients are capable of understanding readily available information on the internet regarding plastic surgical procedures. These informational sites are not a substitute for a consultation with a physician, but may allow for a more informed conversation.

Recommendations

Further studies (already in the design phase) need to look at patient comprehension of material based specifically on reading level. Based on this study the following recommendations can be made:

1. Patient should be encouraged to read and seek out information regarding elective cosmetic procedures on the websites of the ASAPS and ASPS prior to obtaining a consultation from a board-certified plastic surgeon.
2. Neither website provides a more comprehensible product.

Dissemination

An abstract based on the results detailed above will be presented as a poster at the annual ASAPS meeting this year in Vancouver. A manuscript has been prepared based on the results detailed above and will be submitted for publication to *Aesthetic Surgery Journal*.

Table 1

Age	39.8
Grade completed	11.7
Question 1 (pre-operative indications/knowledge)	0.81
Question 2 (pre-operative indications/knowledge)	0.72
Question 3 (complications/post-operative results)	0.72
Question 4 (complications/post-operative results)	0.58
Question 5 (complications/post-operative results)	0.58
Total of all 5 questions	3.41

Table 2

	ASAPS	ASPS	Two-sample t-test comparison of means p-value
Age	36.4	38.4	0.001
Grade completed	11.5	11.8	0.38
Question 1 (pre-operative indications/knowledge)	0.76	0.88	0.28
Question 2 (pre-operative indications/knowledge)	0.68	0.68	1
Question 3 (complications/post-operative results)	0.64	0.68	0.77
Question 4 (complications/post-operative results)	0.56	0.48	0.58
Question 5 (complications/post-operative results)	0.56	0.6	0.78
Total of all 5 questions	3.2	3.3	0.7

Table 3

	ASAPS	ASPS	Two-sample t-test comparison of means p-value
Age	36.4	38	0.68
Grade completed	11.8	11.9	0.55
Question 1 (pre-operative indications/knowledge)	0.76	0.84	0.49
Question 2 (pre-operative indications/knowledge)	0.76	0.76	1
Question 3 (complications/post-operative results)	0.72	0.84	0.32
Question 4 (complications/post-operative results)	0.56	0.72	0.25
Question 5 (complications/post-operative results)	0.56	0.6	0.78
Total of all 5 questions	3.36	3.76	0.32

Table 4

	Completed 12th grade	Did not complete 12th grade	Two- sample t- test comparison of means p-value
Age	40.4	35.8	0.21
Question 1 (pre-operative indications/knowledge)	0.84	0.62	0.15
Question 2 (pre-operative indications/knowledge)	0.72	0.69	0.83
Question 3 (complications/post-operative results)	0.76	0.46	0.07
Question 4 (complications/post-operative results)	0.56	0.69	0.38
Question 5 (complications/post-operative results)	0.59	0.54	0.76
Total of all 5 questions	3.5	3	0.26