Impact of the Current Economy on Facial Aesthetic Surgery

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Abstract

Background: American Society for Aesthetic Plastic Surgery (ASAPS) survey data showed a 16.7% decrease in the total number of aesthetic surgical procedures from 2008 to 2009, whereas plastic surgeons have seen an increase of 0.6% in their nonsurgical cosmetic procedures.

Objective: The authors describe the results of two surveys—one administered to potential patients, one to physicians—assessing the impact of the economy on patient choices in aesthetic facial surgery.

Methods: Two surveys were conducted for this study—one from the American Academy of Facial Plastic and Reconstructive Surgeons (AAFPRS) and one from the Aesthetic Surgery Education and Research Foundation (ASERF). Both surveys utilized the unique maximum difference (MaxDiff) scaling format, which assesses respondent opinions through attribute/question grouping and multiple exposures to the same parameter, rather than traditional one-time questioning. In this way, MaxDiff analysis helped identify the varied drivers of patients’ medical antiaging treatment (MAT) selection. The AAFPRS survey was conducted online through Synovate’s Global Opinion Panel to identify an appropriate audience of potential patients. The ASERF survey contained both MaxDiff and traditional questions and was e-mailed to 2267 ASAPS members.

Results: Data from the AAFPRS patient survey showed that 53% of respondents had been affected by the economy in their decisions regarding MAT procedures, with many seeking out less-costly options such as microdermabrasion. An overwhelming majority (95%) also reported that they would prefer a longer-lasting treatment over an immediate effect with shorter duration; furthermore, 60% felt that duration of treatment was more important than cost in selecting a facial aesthetic procedure. In the ASERF surgeon-based portion of the study, 61% of plastic surgeons felt that patients preferred long-lasting results over immediate ones, but 63% also reported that cost was a more important factor for their patients than duration.

Conclusions: Extrapolating from the patient-reported survey preferences, the authors conclude that nonsurgical facial aesthetic treatment plans should currently be focused more on longevity rather than on immediate impact. There is currently a disconnect between patient preferences and surgeon perception of those preferences, which may be remedied with increased education for both groups. It is worth noting that many patients would be willing to accept a higher cost if it was correlated with a longer-lasting result.

Keywords

facial surgery, economy, survey

The Great Recession, as it is being dubbed, has affected every sector of the economy and has certainly not spared plastic surgery. Recent American Society for Aesthetic Plastic Surgery (ASAPS) survey data showed a 16.7% decrease in the total number of aesthetic surgical procedures between 2008 and 2009. In contrast, physicians have seen an increase of 0.6% in nonsurgical cosmetic procedures. Disparities of this type prompted the American Academy of Facial Plastic and Reconstructive Surgeons (AAFPRS) to conduct a survey researching the impact of the current economy on patient choices and preferences regarding facial plastic surgery and

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minimally-invasive options. Concurrently, the Aesthetic Surgery Education and Research Foundation (ASERF) surveyed members of ASAPS regarding their opinions on similar issues.

**METHODS**

The AAFPRS survey was conducted online through Synovate’s Global Opinion Panel to identify qualified respondents. This group was limited to women ages 30 to 69 years with a household income of at least $50K who were considering medical antiaging treatment (MAT) in the next two years. MAT procedures include prescription topical drugs, nonsurgical procedures, injections, and surgical procedures. The interview length for participants was 10 minutes.

Maximum differential (MaxDiff) analysis was used to identify the varied drivers of MAT selection. The maximum differential exercise requires respondents to make a more critical assessment of product needs than traditional preference measures. Instead of seeing all needs at once, respondents were exposed to four at a time, based on a Latin square (balanced order and pairing) design. Additionally, respondents were exposed and reacted to each attribute multiple times, which provided a more robust evaluation than a one-time assessment; analysis for each criterion, however, was summarized into one measure. MaxDiff does not rely on a scale and derives measures without rating the attribute. A unique set of utilities is calculated for each respondent with the same technique used for discrete choice (hierarchical Bayes).

The ASERF survey was created in conjunction with Industry Insights (a survey research service based in Dublin, Ohio) and e-mailed to 2267 ASAPS members. The survey consisted of both traditional questions and MaxDiff scaling. For the MaxDiff portion of the ASERF survey, physicians were presented with a set of items and asked to choose which was most important and least important to their patients when deciding whether to have a MAT procedure. The MaxDiff technique allowed 11 items to be tested without overwhelming the respondents, since they were asked to consider only four items at a time. The result was a MaxDiff score for each item that indicated both absolute and relative importance. The higher an item’s average score, the higher the importance of that item.

**RESULTS**

**AAFPRS Patient Survey**

Among the sample, quotas were set to achieve five user groups (although members of these groups had some overlap, so the groups are not mutually exclusive): 303 MAT considerers (in the next two years), 281 injectable nonusers, 110 injectable users (within the past two years), 74 filler users (within the past two years), and 204 facial plastic surgery considerers (FPSC). The findings and discussion of this study focus on the FPSC group.

The patients who constituted the FPSC group were found to have a high awareness of MAT procedures as well as a high level of intent to undergo these treatments. In fact, 73% were considering an injectable MAT over the next two years, and 54% responded that it would be extremely likely or very likely that they would undergo some modality of treatment in the next two years. Slightly more than half (53%) of the survey respondents reported that the economy had affected their decision to move forward with antiaging treatments (Figure 1). Moreover, of those affected by the economy, 59% were likely to delay facial plastic surgery for a period of one to two years or more than two years, and 32% were likely to look for a less costly alternative (Figure 2). During the facial plastic surgery postponement period, 29% of respondents reported having undergone another minimally-invasive treatment. For those patients who sought a less costly alternative, microdermabrasion and injectable treatments were most common (Figure 3).

MaxDiff analysis of key treatment decision drivers revealed that the most important factors included the physician’s training and expertise, the duration of effect, the cost of the treatment, and the desire for the treatment to work gradually and be long-lasting, rather than work immediately and last only a short time (Figure 4). When asked to choose between treatments that had an immediate impact but lasted only six months versus treatments with a more gradual effect but which lasted two years, survey respondents chose the longer-lasting treatment, 95% to 5%. When this question was modified to compare immediate results that lasted one year with more gradual results that lasted two years, the result was similar, with
92% preferring the more gradual and longer-lasting treatment (Figure 5). Lastly, when directly comparing cost of treatment to duration of results, the duration of results was a more important factor in treatment decision for 60% of the respondents.

**ASERF Surgeon Survey**

The ASERF questionnaire received 231 complete responses (10.2%), and the ASERF MaxDiff sequence received 164 complete responses (7.2%). The main survey had a ±6.1% margin of error at a 95% confidence level. In the context of injectable treatments, when asked to compare immediate results to long-lasting results, 61% of plastic surgeons felt that for their patients, long-lasting results were more important than immediate results (Figure 6), similar to the patient-reported data in the AAFPRS survey. However, respondents also felt that their patients would prefer an immediate result that lasted 12 months over a more gradual result that lasted two years, at a rate of 82% to 18% (Figure 7), and 63% believed that cost was a more important factor for their patients (Figure 8), both of which are in contrast to the patient responses from the AAFPRS survey.

**DISCUSSION**

Noninvasive cosmetic procedures simply cannot be ignored by today’s plastic surgeon. Beyond the revenue generated prima facie, MAT procedures play a critical role in augmenting one’s invasive surgical practice. This is highlighted by the American Society of Plastic Surgeons (ASPS)/ American Society for Aesthetic Plastic Surgery (ASAPS) Cosmetic Medicine Task Force findings from 2008, in which survey data showed that only 7% of patients with no cosmetic surgical procedure experience would go to a non–plastic surgeon for an invasive procedure, but of the patients who had a positive experience with a non–plastic surgeon for a noninvasive procedure, 47% would return to that provider as a first choice for an invasive procedure. Moreover, with the recent global economic decline, we have seen a corresponding decrease in cosmetic surgical procedures coupled with a persistent demand for nonsurgical procedures. The aforementioned results from the AAFPRS and ASERF surveys support many of our suspicions. Many patients are delaying their cosmetic surgical procedures, as evidenced by the 53% of respondents who indicated that the economy had played a factor in their choice of antiaging treatment. Many (59%) of those potential patients indicated that they would delay surgery for over one year, and 32% were very likely to seek an alternate treatment. These alternate treatments were most typically microdermabrasion or injectables.

The most interesting responses from these surveys lie in the paired comparisons regarding immediacy and duration of treatment results. The statistics are emphatic that these patients prefer a longer-lasting result over an immediate-impact treatment. Even when comparing immediate results that last 12 months with more progressive effects that last for two years, the respondents still chose the longer-lasting treatment at an overwhelming rate. One could argue that this is only an economic effect in that respondents may only be choosing the longer-lasting treatment at the cost of more immediate results to avoid the expense of a retreatment. Although this hypothesis may have some validity, the results of a second direct comparison make it less likely: 60% of the same potential patients reported that

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**Figure 2.** Of the patients who reported delaying their facial aesthetic surgery procedures, 59% were likely to delay facial plastic surgery. Of those, 73% had elected to delay their procedure by one to two years or more.

**Figure 3.** Among the patients who reported delaying their facial aesthetic surgery procedures to look for a less costly alternative (32%), microdermabrasion and injectable treatments were most popular.
they would prefer a longer-lasting result over a more cost-efficient alternative.

These patient-reported results regarding immediacy and duration of effect will likely be a surprise to plastic surgeons. In the ASERF survey, surgeons seemed to feel that patients were mostly focused on a “quick fix” at a low price. Of the plastic surgeons who completed the survey, 82% believed that their patients would prefer an immediate result that only lasted a year rather than a procedure with more gradual effects that lasted over two years. In fact, 63% said that they believed their patients to be more influenced by the cost of the procedure rather than by the duration of the results. These physician claims are obviously in direct contrast with the AAFPRS potential patient responses.

The reason for this disconnect is not entirely clear from the survey data. It is likely a result of many intertwined factors. Stemming from poor communication, there is probably a lack of patient education regarding the advantages and disadvantages of each cosmetic procedure. This may be exacerbated by an absolutist approach from the treating physician—specifically, making decisions for our patients rather than with our patients. Either way, these survey data help to improve our understanding of patients’ mindset, preferences, and choices regarding noninvasive cosmetic procedures, and we can tailor our clinical practices accordingly.

A potential shortcoming of this study is that the ASERF survey questions were often presented in the context of

![Figure 4](https://academic.oup.com/asj/article-abstract/31/7/770/176202/69x226)

**Figure 4.** Patients reported that the key drivers of their medical antiaging treatment (MAT) selection include the physician’s training/expertise and long-lasting results. The total number of patients in this group (facial plastic surgery considerers) was 204.

![Figure 5](https://academic.oup.com/asj/article-abstract/31/7/770/176202/81x204)

**Figure 5.** Respondents consistently preferred the option of a longer-lasting treatment with a gradual onset of change to an immediately-apparent treatment with a shorter duration of effect.
injectables alone, whereas the AAFPRS survey included all modalities of MAT procedures. This renders some of our comparisons between the two surveys imperfect. Also, the survey questions often focused on conceptual therapies rather than head-to-head assessments of various technologies and techniques.

**CONCLUSIONS**

The comparative results of two surveys (one directed at potential patients and one directed at surgeons) revealed a significant impact on facial plastic surgery from recent economic downturns and also a very specific disconnect between plastic surgeons and patients. The survey data suggest that, among the many nonsurgical options available to plastic surgeons, treatment plans should be focused more on longevity than on immediate impact since more gradual-impact treatment with long-term efficacy actually may be preferable to patients over the “immediate fix,” even if a higher cost is associated.

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