Published in final edited form as:

Plast Reconstr Surg. 2016 March ; 137(3): 651e–652e. doi:10.1097/01.prs.0000480007.03293.ed.

FACE-Q Satisfaction with Appearance Scores from Close to 1000 Facial Aesthetic Patients

Anne F Klassen, DPhil,

McMaster University, 3N27, 1200 Main Street W, Hamilton, ON, Canada, L8N 3Z5

Stefan Cano, PhD, and

Modus Outcomes, Stotfold, UK, SG5 4FL

Andrea Pusic, MD, MSc

Memorial Sloan-Kettering Cancer Center, 1275 York Ave, New York, NY, USA, 10065

Anne F Klassen: aklass@mcmaster.ca; Stefan Cano: stefancano@gmail.com; Andrea Pusic: pusica@mskcc.org

Dear Sir

Patient-reported outcome (PRO) instruments are used world-wide to inform clinical practice, comparative effectiveness research, discussions with regulatory bodies and an evidence-based approach to treatment [1]. To address the lack of PRO instruments available to plastic surgeons and dermatologists, our team developed the FACE-Q for use with facial aesthetics patients [2–5]. The FACE-Q includes a variety of scales and checklists that clinicians and researcher may choose from in order to measure patient perceptions of their appearance, post-treatment symptoms and quality of life.

In our recently completed international field-test, we accumulated different samples for each of the 40 plus scales at a different rate and from different patients, with one exception: the 10-item Satisfaction with Appearance scale was completed by almost all participants. This scale, designed to measure outcomes for any type of surgical or nonsurgical facial aesthetic treatment, was previously shown to demonstrate reliability, validity and the ability to detect clinical change [3].

The methods for our study are described in detail elsewhere [2–5]. Satisfaction with Appearance scores range from 0 (lowest) to 100 (highest). Here we present Satisfaction with Appearance scores by timing of assessment and procedure type.

In the field-test study, 952 of 988 participants completed the scale one or more times, providing 1051 assessments. The sample of 952 included more female (87%), Caucasian (78%), and surgical (55%) patients. Mean age was 48 years (range 18–85). In linear

Corresponding Author: Anne F Klassen, McMaster University, 3N27, 1200 Main Street W, Hamilton, ON, Canada, L8N 3Z5, aklass@mcmaster.ca.

Author Contributions: AK, SC, AP had full access to all the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis. Study concept and design: AK, SC and AP. Acquisition of data: AP. Analysis and interpretation of data: AK, SC, AP. Drafting of manuscript: AK. Critical revision of the manuscript for important intellectual content: AK, SC, AP. Statistical analysis: AK, SC, AP. Obtained funding: AP, AK, SC. Administrative, technical or material support: AK, SC, AP. Study supervision: AP.

regression models with Satisfaction with Appearance as the dependent variable, age, gender, race (Caucasian vs. other) and treatment type (surgical vs. nonsurgical) accounted for 10 ($R^2=0.10$; $p<0.001$) and 15 ($R^2=0.15$; $p<0.001$) percent of the variance in pre-treatment (model 1) and post-treatment (model 2) scores respectively. Surgical ($\beta=-9.2$, $p<0.001$) and older ($\beta=-0.12$, $p=0.02$) patients reported lower scores in model 1, and surgical patients reported higher scores ($\beta=14.9$, $p<0.001$) in model 2.

Procedure type (N) for the 909 assessments where treatment involved a single procedure (vs. multiple) included: facelift (181); rhinoplasty (174); botox (168); facial filler (123); skin treatment (106); blepharoplasty (92); and other (65). Satisfaction with appearance (Figure 1) was significantly higher on independent samples t-tests in the post vs. pre-treatment groups for five procedures.

A subgroup of 77 participants completed the FACE-Q scale both before and after treatment (Table 1). Satisfaction with appearance was significantly higher following treatment, with moderate (nonsurgical) and large (surgical) effect sizes.

In conclusion, based on a sample of close to 1000 facial aesthetic patients, satisfaction with appearance was higher in those who have facial aesthetic treatments compared to those who have not, especially for surgical procedures. It is important to note the study limitations, including variability in timing of FACE-Q completion, the sample included more females than males and few participants completed the FACE-Q before and after treatment.

As with the BREAST-Q [4] and the BODY-Q [5], the FACE-Q is available free-of-charge to clinicians and nonprofit users. We encourage the plastic surgery community to make use these PRO instruments to better understand patients concerns and to provide evidence about the benefits of different facial aesthetic treatments.

Acknowledgments

We are grateful for grant funding provided by the Plastic Surgery Foundation. We are indebted to the many clinicians who recruited their patients into the FACE-Q field-test as well as the many patients who participated.

Financial Disclosure: The FACE-Q field-test was supported by The Plastic Surgery Foundation. The FACE-Q is owned by Memorial Sloan-Kettering Cancer Center. Drs Cano, Klassen and Pusic are co-developers of the FACE-Q and, as such, receive a share of any license revenues as royalties based on Memorial Sloan-Kettering Cancer Center's inventor sharing policy. Dr Cano is co-founder of MODUS OUTCOMES, an outcomes research and consulting firm that provides services to pharmaceutical, medical device, and biotechnology companies.

References

1. Black N. Patient reported outcome measures could help transform healthcare. *BMJ*. 2013; 346:167.
2. Klassen AF, Cano SF, Scott A, et al. Measuring patient-reported outcomes in facial aesthetic patients: development of the Face-Q. *Facial Plast Surg*. 2010; 26:303–309. [PubMed: 20665408]
3. Pusic A, Klassen AF, Scott AM, Cano SJ. Development and psychometric evaluation of the FACE-Q satisfaction with appearance scale: a new PRO instrument for facial aesthetics patients. *Clin Plast Surg*. 2013; 40:249–260. [PubMed: 23506765]
4. Pusic AL, Klassen AF, Scott AM, Klok JA, Cordeiro PG, Cano SJ. Development of a new patient-reported outcome measure for breast surgery: the BREAST-Q. *Plast Reconstr Surg*. 2009; 124:345–353. [PubMed: 19644246]

5. Klassen AF, Cano SJ, Scott A, Tsangaris E, Pusic AL. Assessing outcomes in body contouring. *Clin Plast Surg*. 2014; 41:645–654. [PubMed: 25283452]

Figure 1. Mean FACE-Q Satisfaction with Appearance scores comparing pre- and post-treatment groups

Note: cases having multiple procedures not included. Post-treatment assessments ranged from 1 to 21 months for surgical patients and 2 days to 18 months for nonsurgical patients.

Table 1

Mean FACE-Q Satisfaction with Appearance scores, standard deviation (SD), effect size, and minimally important difference (MID) for subgroup of patients who provided before and after treatment data

Procedure Type	N	Pre		Post		Change		Effect size	MID (Based on 0.5 SD)	MID (Based on 0.5 ES)
		Mean	SD	Mean	SD	Mean	SD			
Surgical	50	44.3	14.0	74.0	21.7	-29.7	20.5	2.12	7.0	7.0
Nonsurgical	22	52.9	14.2	62.6	15.4	-9.7	14.5	0.68	7.1	7.1