

Satisfaction predictors for patients seeking facial cosmetic surgery; a systematic review.

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Radboudumc

Introduction – The face



- Facial cosmetic surgery:
 - Popular
 - Improves quality of life

Introduction

- Negative predictors for satisfaction
 - Body dysmorphic disorder (BDD)
- Patient characteristics
 - Demografic
 - Psychosocial
- Familial or relational issues
- Expectations



Purpose of this review

- To define the negative predictors for satisfaction of facial cosmetic surgery
- To find out whether there are valid preoperative assessment instruments available to determine these factors



Methods

- Systematic review of medical literature on PubMed/Medline
- Cochrane library
- Relevant studies from reference lists
- Medical Subject Headings (MeSH) terms:
 - ‘blepharoplasty’
 - ‘rhinoplasty’
 - ‘psychology’
 - ‘personality’
 - ‘self concept’
 - ‘body image’
 - ‘patient satisfaction’
 - ‘quality of life’



Methods

- All factors described as a negative predictor for patient satisfaction after facial cosmetic surgery
- Possible questionnaires that best addressed these factors
 - Brief
 - Validated



Results

- **27 articles included**
 - 11 prospective studies
 - 2 retrospective studies
 - 1 case study
 - 8 reviews
 - 5 expert opinions



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Results: prospective and retrospective

Author	Year	Study type	Findings
Meyer E. et al.(45)	1960	prospective	
Edgerton M.T. et al.(32)	1960	prospective	technology
Jacobson, W.E. et al.(25)			
Hay G.C.			
Wright			
Goin M.			
Last, U. et al.			
Goin M.K. et al.			
Ercolani, M. et al.			
Napoleon et al.(4)			
Zojaji, R et al.(42)			chronic and antisocial personality
Slator, R.et al.(29)			
Guyuron, B. et al.(27)			males, young age
Knorr N. et al.(36)			unrealistic expectations with secondary gain



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Results and expert opinions

Author			poor outcome
Sarwer, D.B. et al.(49)			ADD)
Sarwer, D.B. et al.(6			
Castle, D.J. et al.(7			secondary gain
Honigman, R.J.			order, relationship
Amodeo, G			
Tasman			
Palm			tic
Be			
Olley, P.C. et al.			es,
Rohrich, R.J. et al.(28)	200		ry with
Gorney, M.(51)	2007	Expert op	al disaprovel,
Gorney, M.(11)	2010	Expert opinion	ilial disaprovel,
Rohrich, R.J. et al.(66)	2011	Expert opinion	minimal deformities, a



Results

- **Questionnaires**
 - Minnesota Multiphasic Personality Inventory
 - To exclude psychiatric disorders
 - Guilford-Zimmerman Temperament Survey
 - Measures personality characteristics
 - 300 items (30-60 min)
 - Tennessee Department of Mental Health self concept scale
 - 100 items
 - Validity seriously questioned in several studies



Discussion

Author	Year	Study type	Factors predicting poor outcome	
Author	Year	Study type	Factors predicting poor outcome	
Meyer E. et al	Sarwer, D.B. et al.(49)	1998	Review	Body Dysmorphic Disorder (BDD)
Edgerton M.T.	Sarwer, D.B. et al.(63)	1998	Review	n.s.
Jacobson, W.E	Castle, D.J. et al.(2)	2002	Review	male gender, young age, unrealistic expectations with secondary gain
Hay G.G. et al	Honigman, R.J. et al.(3)	2004	Review	male gender, young age, depression, anxiety, BDD, personality disorder, relationship issues, unrealistic expectations, minimal deformity, previous surgery with unsatisfactory outcome.
Wright, M.R. et al	Amodeo, C.A.(37)	2007	Review	depressed patients, obsessive patients, uncooperative patients, unrealistic expectations
Goin M.K. et al	Tasman A.J. (35)	2010	Review	SIMON, personality disorder, unrealistic expectations, demanding patients, surgiholics
Last, U. et al.(64)	Palma, P. et al.(64)	2011	Review	SIMON
Goin M.K. et al	Belli,H. et al.(65)	2012	Review	SIMON, personality disorder
Ercolani, M. et al	Olley, P.C. et al.(34)	1974	Expert opinion	previous cosmetic surgery with unsatisfactory outcome, relationship issues, unrealistic expectations with secondary gain.
Napoleon et al	Rohrich, R.J. et al.(28)	2003	Expert opinion	minimal deformities, unrealistic expectations, previous cosmetic surgery with unsatisfactory outcome
Zojaji, R et al.	Gorney, M.(51)	2007	Expert opinion	great expectations, demanding patient, surgiholic, marital or familial disaprovel, pushed into surgery, incompatibility, BDD.
Slator, R.et al.	Gorney, M.(11)	2010	Expert opinion	great expectations, demanding patient, surgiholic, marital or familial disaprovel, pushed into surgery, incompatibility, BDD.
Guyuron, B. et al	Gorney, M.(11)	2010	Expert opinion	great expectations, demanding patient, surgiholic, marital or familial disaprovel, pushed into surgery, incompatibility, BDD.
Knorr N. et al.	Gorney, M.(11)	2010	Expert opinion	great expectations, demanding patient, surgiholic, marital or familial disaprovel, pushed into surgery, incompatibility, BDD.
	Rohrich, R.J. et al.(66)	2011	Expert opinion	minimal deformities, unrealistic expectations

Discussion

- Studies use various terms to address similar aspects

demanding patients and patients unsatisfied after multiple previous surgeries

=

patients with unrealistic expectations concerning the surgical possibilities

- We tried to conjoin the similar aspects
- 7 final aspects were acknowledged that are described in at least 2 studies

1. **Males (9)**
2. **Young age (7)**
3. **Unrealistic expectations concerning the surgical result (10)**
4. **Unrealistic expectations concerning secondary gain (6)**
5. **Minimal deformities (5)**
6. **Narcissistic personality (2)**
7. **Obsessive personality (2)**



Discussion

- We need:
 - a pre-operative questionnaire to measure patients expectations concerning the surgical and social outcome
 - a post-operative questionnaire to determine whether or not the expectations were fulfilled
- Remarkable:
 - Most of the studies on this subject are outdated
 - Quality of life and patient satisfaction have become essential outcomes by which the effect of surgery is determined in medicine today...



Conclusions

- Indication of seven negative predictors for satisfaction after facial cosmetic surgery
 - Males
 - Young age
 - Unrealistic expectations concerning the surgical result
 - Unrealistic expectations concerning secondary gain
 - Minimal deformities
 - Narcissistic personality
 - Obsessive personality
- A suitable validated questionnaire is still lacking



Conclusions

- Further research is ongoing:
 - Development of a brief instrument
 - Recognition of the 7 factors
 - Currently started with a pilot study
 - To be continued...

Reference:

Negative predictors for satisfaction in patients seeking facial cosmetic surgery; a systematic review.

Herruer, J.M. et al: scheduled for publication in the June 2015 issue of *Plastic and Reconstructive Surgery*



