



Coping Strategy and Cosmetic Surgery: a Case Control Study

Marziye Niknam¹, Ali Kamkar², Ali Mohammadi³, Narges Fooladi vanda⁴ and Mohammad Fararouei⁵

1- (Unit of Science and Research) Islamic Azad University, Fars, Iran.

2- (Department of Psychology) Yasuj University of Medical Sciences, Iran.

3- (Department of Psychology) Yasuj University of Medical Sciences, Iran.

4- Yasuj University of Medical Sciences, Iran.

5- (Department of Epidemiology and Biostatistics) Yasuj University of Medical Sciences.

fararouei@gmail.com

Abstract: Our body dissatisfaction may cause stress and lead us to take extreme and risky behaviors as response. This study was conducted to compare coping strategies among individuals undergone nasal plastic surgery and their controls. The study measured the association of coping strategies and cosmetic surgery. Participants were selected among individuals undergone cosmetic surgery came for first follow-up visit by their surgeons. Fifty patients undergone nasal surgery and 50 controls with no history or intention of applying for cosmetic surgery were recruited. Lazarus (1988) revised coping strategies questionnaire was used to measure coping strategies. Student paired t test was used to compare cases and control groups. Results suggest positive associations between cosmetic surgery and three subscales of coping methods (distance, excitement focused and escape – avoidance) ($P < 0.05$). On the other hand, surgery group apply less active coping strategies: positive reappraisal, problem focused and problem solving strategies ($P < 0.05$). In stressful situations like personal dissatisfaction, different individuals use different approaches which may lead them to adopt risky behaviors including cosmetic surgery.

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1. Introduction:

Socialization is an inevitable stage of our life. It sometimes makes our appearance - beauty and fitness- most important to us. Cosmetic surgery and diet are effective methods to help us look better. However, cosmetic surgeries are costly and a wide range of complications are attributed to them (Cohen & Brown, 2009; Patel, Shah, Clune, & Chang, 2012; Weber, Junior, & Jurado, 2010). Despite the high cost and complications, cosmetic surgeries are getting popular in many communities with different cultural and social background. For example, rhinoplasty and other aesthetics procedures of the face are becoming more and more common in the United States and Iran (Gazagnadou, 2006; Maltby & Day, 2011; Markey & Markey, 2009). The uprising popularity of cosmetic surgeries in socialized communities is partly due to the fact that good appearance and fitness seems to provide higher personal satisfaction and better social life (Clark, Skouteris, Wertheim, Paxton, & Milgrom, 2009; Kewin & Boyle, 2011; Moss & Harris, 2009; Vander Wal, 2012).

Decision on undergoing elective cosmetic surgeries is driven by a wide range of personal and social factors (Markey & Markey, 2009) including personality, celebrities, friends and family members (Maltby & Day, 2011; Pentina, Taylor, & Voelker, 2009; Shroff & Thompson, 2006). Some psychologists believe that our decision on undergoing plastic surgery may also be affected by emotional and cognitive motives including stress (Slevec & Tiggemann, 2010). For example, Wissanji and Boyle (2009) suggested that stress due to change in perceived self and body dissatisfaction act as an important psychological factor in making decision on elective cosmetic surgery (Wissanji, 2009).

Stress is an inevitable aspect of human life caused by any type of incident, action or situation (including body dissatisfaction). Stress confronts individuals with physiological or mental problems. It is believed that our stress level and coping strategies depend on several issues including social, cultural and personal backgrounds (Bishop et al., 2001; De Sousa, 2010; Sideli et al., 2010).

Lazarus and Folkman (1984) have divided personal coping strategies into two groups: problem-focused (active strategies) and excitement-focused (passive strategies). Problem-focused coping strategies include seeking social support, accepting responsibility, planned solving problem and positive reappraisal. Excitement-focused coping strategies include direct coping, distance, self-control and escape-avoidance (Lazarus & Folkman, 1984).

With respect to the importance of coping strategies, it is suggested that a gap between real-self and ideal-self along with lack of active coping mechanisms in women may cause more dissatisfaction with their body, resulting in some psychological disorders and usage of radical solutions including cosmetic surgery (De Sousa, 2010; Lipworth et al., 2009; Wissanji, 2009).

According to the above issues and yet increasing interest in cosmetic surgery, this study investigates whether people with different coping strategies use different approaches to body dissatisfaction?

2. Material and Methods

Fifty patients came to ENT specialists for post-operative follow up after cosmetic nasal operation were recruited. The patients were predominantly female (58%) single (60%) and had a university degree or were university student (62%). Fifty participants with no history of cosmetic surgery also participated as controls. The participants in the control group were matched for sex, age (± 2 years), education, marital status and income. Controls were selected among friends, relatives of the patients or university students. The surgery group must have no medical indication for nasal surgery confirmed by their surgeon.

At the first post-operative follow up visit, patients with no medical indication for their nasal surgery were invited to participate in an interview followed by filling up a questionnaire. The participants then were asked to introduce any friends or relatives with the same characteristics used for matching to be interviewed as controls.

All participants read and signed an informed consent document. To measure coping strategies, the Lazarus (1988) revised coping strategies questionnaire was used (Folkman & Lazarus, 1988). The questionnaire measures a wide range of emotional and behavioral indices, which are used by individuals to confront internal or external stressful situations. This test has eight subscales: direct coping, distance taking, self-control, escape-avoidance, accepting responsibility, seeking social support, solving problems and positive reappraisal. Paired student t test was used to analyze the data.

Results:

This study recruiting 50 participants undergone cosmetic surgery and 50 controls measured and compared coping strategies between the two groups. The demographic characteristics of the participants which were matched between the two groups are presented in table 1. Accordingly, subjects were dominantly between 26 to 30 years of age (46%) and had monthly income from 7010000 to 9000000 Rials (32%). Comparison of other economic indicators which were not matched (i.e. owning a car and/or a house) suggested non-significant differences between the surgery and control groups ($P > .05$). In addition, considering socio-economic background of the participants, we also measured and compared parents' occupation. No significant difference was found between the two groups ($P > .05$).

Comparison of the surgery and control groups shows that the cosmetic surgery group obtained higher scores in distance (0.87 points, $p < .01$) and escape-avoidance (1.74 points, $p < .01$) subscales (Table 2). On the other hand, less scores were found among cosmetic surgery group in active coping strategies ($p = .012$) including positive reappraisal (-1.36 points, $p = .013$) and problem solving (-1.82 points, $p < .01$). No significant difference was found between the two groups in subscales of self-control ($p = .22$), seeking social support ($p = .16$) and acceptance responsibilities ($p = .13$). As presented in table 3, the difference between participants undergone cosmetic surgery and controls in excitement focused (difference = 2.46, $p = .04$) and problem focused (difference = -4.78, $p = .002$) strategies have reached to significant levels.

Comparison of the two groups using data obtained in the qualitative interview showed no significant association between cosmetic surgery and sexual experiences before marriage ($P > .05$). Two groups were also not significantly different in respect to an experience of love failure before marriage ($P > .05$).

Discussions

The result of this study suggested that the surgery and control groups use different coping strategies in confrontation with stress. The individuals undergone plastic surgery use more excitement-focused strategies, the passive methods of coping with stress. In contrast, participants in the control group (not applied for plastic surgery) use more problem-focused coping strategies which are active styles of coping with stress.

In most communities the contribution of social environment (mass media in particular) in the individuals self-esteem and body dissatisfaction (interest in cosmetic surgery as a result) is undeniable

(Markey & Markey, 2009; Mask & Blanchard, 2011). However, their effects on each member of the community are different due to many other contributing factors including family and social supports as well as personality (Maltby & Day, 2011; Pentina et al., 2009; Slevic & Tiggemann, 2010). In accordance with the results of the present study which suggest no differentiable sexual and emotional (love failure) experience between the two groups, it seems that the decision on undergoing cosmetic surgery is not driven by sexual motives as both groups were similarly successful in this area.

Schofield and colleagues reported statistically significant associations between cosmetic surgery and several psychological and behavioral covariates. These factors include poorer mental health, lower life satisfaction, higher stress and smoking, (a harmful behavior which is directly associated with stress) (Schofield, Hussain, Loxton, & Miller, 2002). In our study also a considerable difference between the two groups was observed in a particular aspect of personality (coping strategies). It seems individuals undergone cosmetic surgery are more likely to suffer from psychological weaknesses. To explain the mechanism of action of the above issues Wissanji (2009) suggested that although mass media images may change ideal- self image of women, those use inappropriate coping mechanisms more likely use extreme measures including plastic surgery or chronic diet to fill up the gap between perceived and ideal self images (Wissanji, 2009). Accordingly, with the lack of proper coping mechanisms women accept idealized female images (fragilization) and will confront more body dissatisfaction. This can cause taking extreme measures including chronic dieting and cosmetic

surgery to fill the gap between perceived and idealized self image. The results of present study suggest, those applied for cosmetic surgery may use passive copying strategies in stressful situations throughout their life. It seems therefore, better coping abilities and having some related social skills may not only help individuals to take more reasonable measures to decrease their body dissatisfaction, but also may increase their quality of life (Sanjūn, Arranz, & Castro, 2012). Being able to cope with stress may also alter some risky behaviors like smoking and addiction (Korotkov, 2008). More studies are needed to understand whether there is a causal association between coping strategies and cosmetic surgeries and -if so- what is the mechanism of its action.

Consultation and social and personal training programs via mass media or schools aiming children, adolescents and young adults may increase their ability to apply appropriate coping strategies. If so, pre and post operational training courses for individuals undergone cosmetic surgeries may help them respond better in stressful situations. In addition to individuals with appearance dissatisfaction, those with improper health related behaviors like substance abuse may also benefit these courses as they may help them to overcome their vulnerability in their personal and social life (Hasking, Lyvers, & Carlopio, 2011; Martin, Tuch, & Roman, 2003).

The results may were different if -instead of those applied for cosmetic surgery- those interested in plastic surgery were chosen. This is due to the fact that the study participants- those undergone plastic surgery- were relatively more educated and wealthier than the general population.

Table 1: Demographic Characteristics of Participants Undergone Cosmetic Surgery and Their Controls.

Variables	Groups		
	Undergone cosmetic surgery	Control	
Sex	Male	21 (42%)	21 (42%)
	Female	29 (58%)	29 (58%)
Marital status	Single	30 (60%)	30 (60%)
	Married	20 (40%)	20 (40%)
Age	Under 20 years	5 (10%)	5 (10%)
	21-25 years	14 (28%)	14 (28%)
	26-30 years	23 (46%)	23 (46%)
	30-35 years	8 (16%)	8 (16%)
Education	Compulsory or less education	19 (38%)	19 (38%)
	University student or graduated	31 (62%)	31 (62%)
Income(IRs)	Under 5000.000	13 (26%)	13 (26%)
	5010000-7000000	9 (18%)	9 (18%)
	7010000 – 9000000	16 (32%)	16 (32%)
	9010000 +	12 (24%)	12 (24%)

Table 2- Copying Strategies in Participants Undergone Cosmetic Surgery (N=50) and Their Controls (N=50).

Subscale of coping strategies	Group	Mean (SD)	Paired t score	P.value
Distancing	Undergone cosmetic surgery	7.49 (2.50)	2.75	0.008
	control	6.62 (2.99)		
Self - control	Undergone cosmetic surgery	10.1 (2.46)	1.23	0.22
	control	9.50 (2.50)		
Escape - Avoidance	Undergone cosmetic surgery	9.16 (3.25)	2.99	0.009
	control	7.42 (3.49)		
Direct coping	Undergone cosmetic surgery	8.40 (2.47)	-2.61	0.012
	control	9.60 (2.25)		
Positive reappraisal	Undergone cosmetic surgery	11.44 (2.53)	-2.58	0.013
	control	12.80 (2.83)		
Seeking social support	Undergone cosmetic surgery	10.78 (3.48)	-1.41	0.16
	control	11.78 (3.47)		
Accepting responsibility	Undergone cosmetic surgery	6.24 (2.37)	-1.52	0.13
	control	6.84 (2.63)		
Problem focused copying	Undergone cosmetic surgery	8.90 (2.90)	3.60	0.001
	control	10.72 (2.29)		

Table 3: Copying Strategies in Participants Undergone Cosmetic Surgery (N=50) and Their Controls (N=50).

Dimension of coping styles	Groups	Mean (SD)	Paired t score	P.value
Excitement- focused coping	case	35.60 (6.80)	2.09	0.04
	control	33.14 (7.11)		
Problem - focused coping	case	37.36 (7.68)	-3.24	0.002
	control	42.14 (7.12)		

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Corresponding author:

Mohammad Fararouei
Department of Epidemiology and Biostatistics
Yasuj University of Medical Sciences
Dastgerdi St., Yasuj; Iran.
Email: fararoei@gmail.com

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