

Body Part Concerns Questionnaire (BPCQ) in an Iranian Population with Special Needs

Katayoun Khademi

University of Payame Noor, Tehran, Iran

Asghar Dadkhah, PhD.¹

University of Social Welfare and Rehabilitation Sciences, Tehran, Iran

Vahid Kazemi, MD.

Islamic Azad University (Tehran Medical branch)

Objective: Cosmetic surgery has become increasingly popular in the past decades. The purpose of this study was to design a questionnaire for screening 'negative body image' in special needs populations referring to cosmetic clinics.

Method: One hundred and fifty special needs individuals in cosmetic clinics were randomly selected and assigned to fill questionnaires to assess their body part concerns.

Results: Results of reliability analysis and validity have shown the effectiveness of this questionnaire for recognizing individuals with negative body image. These preliminary results suggest that body dysmorphic disorder may be relatively common among patients seeking cosmetic surgery.

Conclusions: A high proportion of patients in cosmetic clinics have demonstrated significant body image concerns. These relatively common body image concerns deserve more study in adolescents and people with special needs.

Keywords: body image, body part, body dysmorphic disorder, body part concerns questionnaire, cosmetic clinics

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Introduction

Body image is a person's perception of his/her physical appearance. There is little relation between the actual appearance and sense of attractiveness. Great physical appearance doesn't guarantee a positive body image, or does lacking natural beauty lead to a negative body image. In fact, beauty doesn't properly reflect one's feelings of body image; it depends on one's appearance.

There are relations between body image and feeling, thinking and acting in particular conditions (1). One of the key features of the 'Body Dysmorphic Disorder' (BDD) definition is excessive preoccupation with slight or imagined defect in body appearance (2). BDD has the worst outcome of all the body image disorders (3). Since BDD has a negative impact on quality of life (4) screening BDD patients in clinical settings seems important (5).

Sense of body image may put an adolescent's physical health at risk (6). However, physical concerns don't necessarily reflect body dysmorphic

disorder (7). In addition, there are high numbers of BDD patients that have extreme body image dissatisfaction (8). The main feature of BDD is excessive attention to negative body image. Subsequently, negative evaluation of images can lead to rumination, mood changes and compulsive behaviors (3). Self-worth based upon appearance (9) and poor body image is important in BDD (10). The feeling of attractiveness (11) and body image can influence BDD symptoms (12). BDD patients have high rates of suicidal ideation and attempts and also completed suicide attempts (13). Since this disorder can have a devastating effect on the quality of a person's life, it seems necessary to identify it at an early stage (14).

Compared to men, women are more likely to undergo cosmetic surgery. Lack of body satisfaction can predict cosmetic surgery. Experience of cosmetic surgery among family or friends can increase the rate of cosmetic surgery in women. Media has no effect on the rate of cosmetic surgery

1- All correspondences to: Dr. Asghar Dadkhah; Email:< asgaredu@uswr.ac.ir >

in either gender (15). Some bodily concerns about weight and breast augmentation have the potential of developing body image disorders like BDD (16, 17).

Method

The Body Part Concern Questionnaire (BPCQ) has been prepared as a screening tool for patients with negative body image in cosmetic clinics.

This study has been conducted on 150 female special needs patients in cosmetic clinics in Tehran, Iran. All of them wanted to have cosmetic surgery. Their average age was 29.8 years and 65% of them were single. Participants completed the questionnaires and were administered clinical interviews to evaluate body image concerns. All statistical procedures were accomplished with SPSS 18 statistical software.

Results

This 33-Item questionnaire evaluates body image satisfaction in terms of positive and negative items. The BPCQ is graded by a Likert scale, and the score is achieved by summing the scores of questions 1 to 33. The total score ranges from 33 to 165 with a higher score reflecting greater agreement. The answering options are: strongly agree, agree, undecided, disagree and strongly disagree. Pearson correlation of the BPCQ with the Physical Appearance Concern Questionnaire (PACQ) was 0.259 (P=0.002) (18). The validity of the questionnaire has been checked by a number of university professors.

The reliability of the questionnaire was evaluated by Cronbach's Alpha ($\alpha=0.883$), suggesting that the items have relatively high internal consistency with corrected item total ranging from 0.011 to 0.535. Mean variance and Cronbach's Alpha for each item deleted has been shown in table (1).

Table 1. Mean variance and Cronbach's Alpha for each item

Item	Scale Mean if Item deleted	Scale Variance if Item deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item deleted
1	69.2276	201.941	.011	.888
2	69.1793	195.676	.240	.883
3	69.6828	196.968	.212	.883
4	68.9034	186.963	.385	.881
5	69.0483	186.143	.515	.877
6	68.9655	187.214	.465	.878
7	69.5103	190.488	.518	.878
8	69.7241	194.090	.400	.880
9	69.6828	192.676	.407	.879
10	68.9862	189.653	.413	.879
11	69.1379	188.259	.455	.878
12	69.4000	192.200	.417	.879
13	69.0483	189.852	.452	.878
14	68.8345	191.597	.331	.881
15	69.3862	191.433	.412	.879
16	69.4000	191.867	.342	.881
17	69.3379	191.892	.411	.879
18	69.4621	189.820	.527	.877
19	69.3241	191.443	.446	.879
20	69.2690	188.434	.472	.878
21	69.1931	189.907	.401	.880
22	69.5103	188.821	.535	.877
23	69.2828	190.482	.438	.879
24	69.2759	189.534	.368	.881
25	69.5517	192.249	.501	.878
26	69.5379	192.348	.449	.879
27	69.1310	186.323	.519	.877
28	69.4069	193.396	.351	.880
29	69.3724	189.846	.469	.878
30	69.3724	192.596	.381	.880
31	69.5862	192.355	.502	.878
32	69.5517	194.166	.379	.880
33	69.6069	191.726	.533	.878

Results of reliability and validity of the BPCQ have demonstrated that using this questionnaire can help screen patients for negative body image in cosmetic clinics.

Discussion

This questionnaire consists of questions on several body parts and the general feeling about skin color, weight and body proportion. This questionnaire therefore identified the undesirable parts of body. In this study 141 out of 150 patients had a negative body image.

According to the BPCQ, 60.5% of participants were diagnosed with BDD after the clinical interview. Approximately 90% of patients in cosmetic clinics have demonstrated dissatisfaction with their body image.

Based on 150 filled BPCQs, the top 10 common locations of perceived flaws in order were: abdomen, waist, weight, body hair, hips, body proportion, height, thighs, skin, and breasts. The most satisfactory parts of body are: hair color, eye size, eye color, mouth shape, face shape, neck, chin & jaw, hand & wrist, shoulders and skin color. In a sample from Turkey, 43.8% of the 420 female college students studied had body image dysfunction. The most common areas of concern were head, face and hips (19). Out of the 156 medical students in Karachi University, 78.8% of the students reported dissatisfaction with some aspect of their appearance (22).

Body dissatisfaction is notably one of the most important features of BDD (23), anorexia and bulimia nervosa. Thus, evaluation of body image satisfaction is a necessary element for those treating eating disorders and BDD. In fact, having a negative body image is not a good reason for having cosmetic surgery. Conversely, those supposed to have normal body image had better be screened. In our opinion, some patients who have no insight of a poor body image will understand how they feel about their physical appearance upon filling this questionnaire.

Some of the BDD patients have continual plastic surgeries with hopes of finding personal satisfaction and a perfect body. However the perfect body is almost unachievable (1); nearly all of them have a negative body image. BDD sufferers are often concerned with more than one part of their body (10, 20).

This questionnaire helps physicians understand that patients have concerns in specific parts or that they have a totally negative body image. In case of having poor body image, surveying BDD seems necessary. Body image dissatisfaction can be used as predictor for certain disorders in which it can play a role as a risk factor, such as eating disorders (21, 24). 20.7% of patients seeking rhinoplasty had a potential diagnosis of BDD (20), so it would be useful to screen them for BDD symptoms in cosmetic clinics. Moreover, there are several patients who have no BDD symptoms, but who have negative body image. Informing such individuals of such feelings could help them avoid cosmetic surgery and turn their negative body image into a positive one.

To our knowledge, this is the first time this tool has ever been used for identifying patients with negative body image in cosmetic clinics in Tehran, Iran.

We acknowledge a number of limitations in the present study. First, all participants were female because male patients weren't interested in taking part in the study. This may limit the ability to generalize our findings. Second, if we could have worked on a larger sample size, our results would be much more reliable. Despite these limitations, this study provides new and insightful information into people's perception towards physical appearance and how people with special needs are prioritized in Tehran, Iran. More research is required to develop a screening questionnaire or interview for identifying patients with special needs and others seeking cosmetic surgery.

With the increasing prevalence of plastic surgery in Iran, it is useful to consider those factors that may increase the likelihood of undergoing cosmetic surgery in a non-patient population in future studies.

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