**Body Part Concerns Questionnaire (BPCQ) in Iranian special needs population**

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**Abstract:**

**Objective:** During the past decades, cosmetic surgery has become increasingly popular. The purpose of this study is to make questionnaire for screening patients with negative body image in cosmetic clinics for special need people.

**Method:** In the present study, 150 special need people in cosmetic clinics were randomly assigned to fill questionnaires for assessing body area concerns.

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

**Discussion:** A high proportion of participants 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

**Introduction:**

Body image is a perception of outer physical body. There is little relation between actual appearance and sense of attractiveness. Great physical appearance doesn’t guarantee the positive body image and also lacking natural beauty doesn’t lead to negative body image. Actually beauty doesn’t reflex properly feeling about body image, it depends on one’s appearance considered.

There is relation between body image and feeling, thinking and acting in particular condition (1).

One of the most key features in 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). Whereas BDD have negative impact on quality of life (4) Screening BDD patients in clinical setting seems important (5).

Sense of body image may put 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). Main part of BDD is excessive attention on negative body image and then negative evaluation of images can cause to rumination, mood changes and compulsive behaviors (3). Self-worth based upon appearance (9) and poor body image is important in BDD (10). Feeling attractiveness (11) and body image can influence BDD symptoms (12). BDD patients have high rates of suicidal ideation and attempts and also completed suicide (13) Since this disorder can have a devastating effect on the quality of person's life , it seems necessary to identify it.(14)

Women in comparing with men are more likely of undergoing cosmetic surgery and also lack of body satisfaction can predict lead to undergoing cosmetic surgery. Experience of cosmetic surgery among family or friend can increase rate of cosmetic surgery in women. Media has no effect about rate of cosmetic surgery on both genders (15). Some concerns in body like weight concern and breast augmentation have potential of body image disorders like BDD (16, 17).

**Method:**

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

This study has been conducted by 150 female special need patients in cosmetic clinics in Tehran, Iran. All of them tended 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 interview to evaluate body image concerns. All statistical procedures were accomplished with SPSS statistical software (version 18 for windows).

**Results:**

This 33- Item questionnaire evaluates body image satisfaction in term of positive and negative items. BPCQ graded by Likert scale, the score is achieved by summing Q1-33. The total scores range from 33 to 165 with a higher score reflecting greater agreement. Answers are among: strongly agree, agree undecided, disagree and strongly disagree.

Pearson correlation of the BPCQ with the Physical Appearance Concern Questionnaire (PACQ) is 0.259 (P=0.002) (18)**.** Validity of the questionnaire has been checked by number of university professors.

The reliability of the questionnaire is evaluated by Cronbach’s Alpha (α = 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 |

Result of reliability and validity of Body Part Concern Questionnaire (BPCQ) has demonstrated that using this questionnaire can help screen patients in cosmetic clinic for negative body image.

**Discussion:**

This questionnaire consists of several body parts and also general feeling about skin color, weight and body proportion. Result of this questionnaire can determine the undesirable parts of body. In this study 141 out of 150 patients have shown negative body image.

According to BPCQ, 60.5% of participants have been diagnosed for BDD after clinical interview. Approximately 90 out of 100 patients in cosmetic clinics have demonstrated dissatisfaction body image.

Based on 150 filled BPCQ, The top 10 Common locations of perceived flaws are in order: Abdomen, waist, weight, body hair, hips, body proportion, height, thighs, skin, and breasts. The most satisfying 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, among 420 female college students, the rate of student with appearance image dysfunction was 43.8%, The most area of their concerns 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 for BDD (23) anorexia and bulimia. Thus, evaluation of body image satisfaction is a necessary element for those who treat eating disorders and BDD. Actually, having negative body image couldn’t be good reason for patients to have cosmetic surgery; however they had better be screened from the others who have normal body image. In our knowledge, some of the patients that have no insight of having poor body image, filling this questionnaire can help them understand how they feel about their physical appearance.

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

This questionnaire helps physicians to understand that patients have concern in specific part or they have totally negative body image. In case of having poor body image, surveying the BDD presence seems necessary. Body image dissatisfaction can be used as predictor for some disorders in which it can play role as risk factor like eating disorder (21, 24). 20.7% of patients seeking rhinoplasty and a potential diagnosis of BDD (20), it would be useful to screen them in cosmetic clinics for checking BDD symptoms. In addition, there are several patients that have no BDD symptoms, however they have negative body image, so informing them of such these feeling, may could help them avoid cosmetic surgery and turn them into positive body image.

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

We acknowledge a number of limitations to the present study. First, because male patients weren't interested to take part in this study therefore all participants were female. This may limit the ability to generalize our findings. Second, if we could have worked on large sample, our result would be much more trustable. Despite these limitations, this study provides new and insightful information about perception towards physical appearance and how they are prioritized in Tehran, Iran. More research is required in the development of a screening questionnaire or interview for identifying patients with special needs and the other who 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 further study.

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