

## Evaluation of psychologic profile of patients reporting with dentofacial defects, a cross sectional study

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### **Abstract**

#### **AIM**

Body dysmorphic disorder is a psychiatric disorder according to diagnostic manual for mental disorders where patients have delusions and unsatisfactory perceptions and unrealistic expectation and seek for surgical help. aim of the study was to assess body dysmorphic profile of patients complaining of dento facial defects and association of other variables

#### **Method**

We have taken sample size of 100 patients of age more than 18 years with complaint of maxillofacial defect, out patients were asked to fill a BDDQ questionnaire

#### **Results**

53% of patients were screened positive for BDD and significant association were found with other variables

#### **Keywords**

Body dysmorphic disorder, diagnostic statistical manual, questionnaire, dentofacial defects.

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### **I. Introduction**

Body dysmorphism is a psychiatric disorder where patient is very obsessed about appearance of one part of the body without having a defect or minor defect, such patient will deprive themselves from social activities and maybe dissatisfied after surgery. Body dysmorphic disorder is a DSM IV psychiatric disorder according to diagnostic and statistical manual for mental disorders (DSM). Psychiatrist could play an important role in educating maxillofacial surgeons in how to recognize BDD. Referral of these patients to psychiatrist is mandatory for litigation and unnecessary aesthetic surgery in these patients

Psychological assessment of patient requesting orthognathic surgery involves a structured method questioning which allow to screen patients with BDD. the general consensus about treatment of BDD is by non-clinical methods like counselling, behavioral therapy and pharmacological therapy may be beneficial.

#### **Aims and objectives**

To evaluate psychological profile of patients reporting with dentofacial defects and to do screening of patients with BDD

To find association of different variables such as age, sex, marital and socio-economic status with psychological profile of patients

#### **Methodology**

This study has questionnaire (BDDQ) with 20 questions and asked to fill in the presence of principal investigator, which measures whether patients fulfil DSM IV criteria for body dysmorphism

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Study was conducted in government dental college Calicut after ethical clearance, with duration of 18 months  
Inclusion criteria: Patients with complaints of dentofacial deformities, patient who give willingness to participate in the study

Exclusion criteria: Patients who has history of psychiatric disorder, patients with congenital disorders like cleft lip and palate

Sample size,  $n = 4pq/d^2$

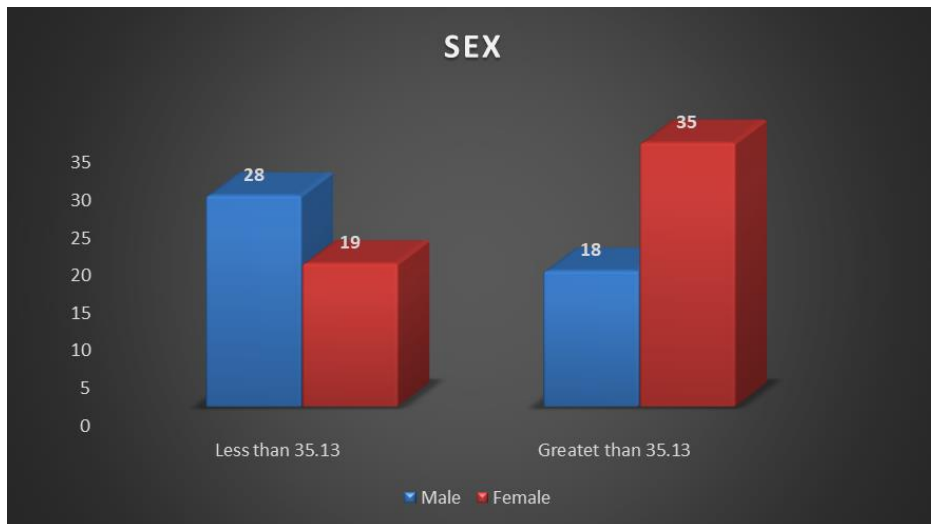
$p = 10\%$   $q = 100 - p$   $d = 6$ , So  $n = 4 \times 10 \times 90 / 36 = 100$ , sample size of 100

### Statistical analysis

chi square test is done for qualitative analysis, independent t test is done for quantitative analysis and Fischer's exact test is also done for to find association between two non-random variables, p value taken as 0.0001, P value .0.001 is taken as statistically significant.

## II. Results

the aim of the study was to assess or to screen whether patient had BDD and to find association with variables mentioned in the Proforma, mean cut off score was taken as 35.3, so patients with score above 35.3 is screened as body dysmorphic

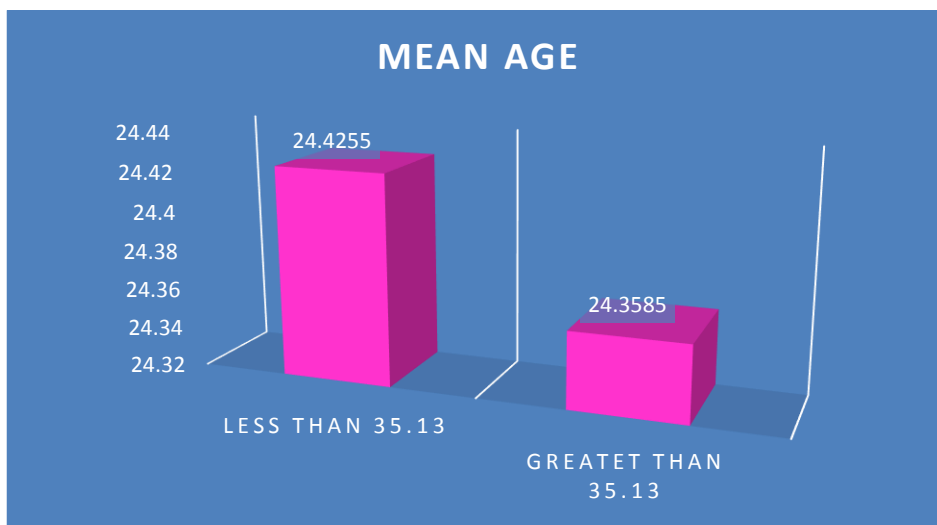


Test : Chi-square test

p-value : 0.010

Inference : There is significant association between sex and BDD, 34% males and 66% females were screened positive for BDD.

### AGE



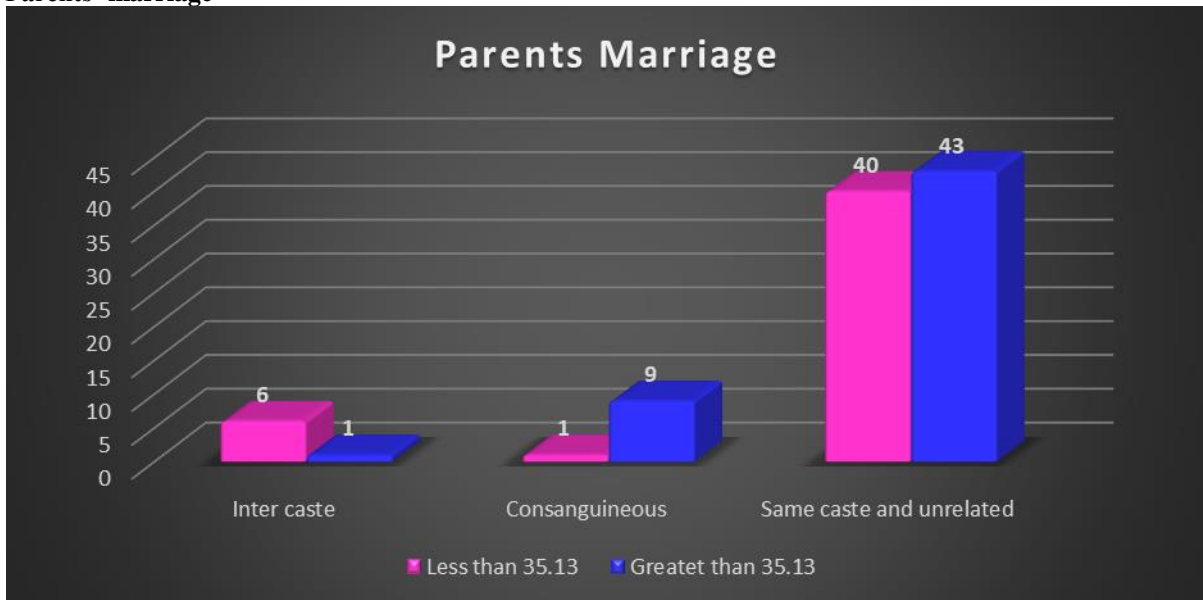
The mean age of patient screened with or without BDD is 24.3 years

Test : Independent sample t-test

p-value : 0.944

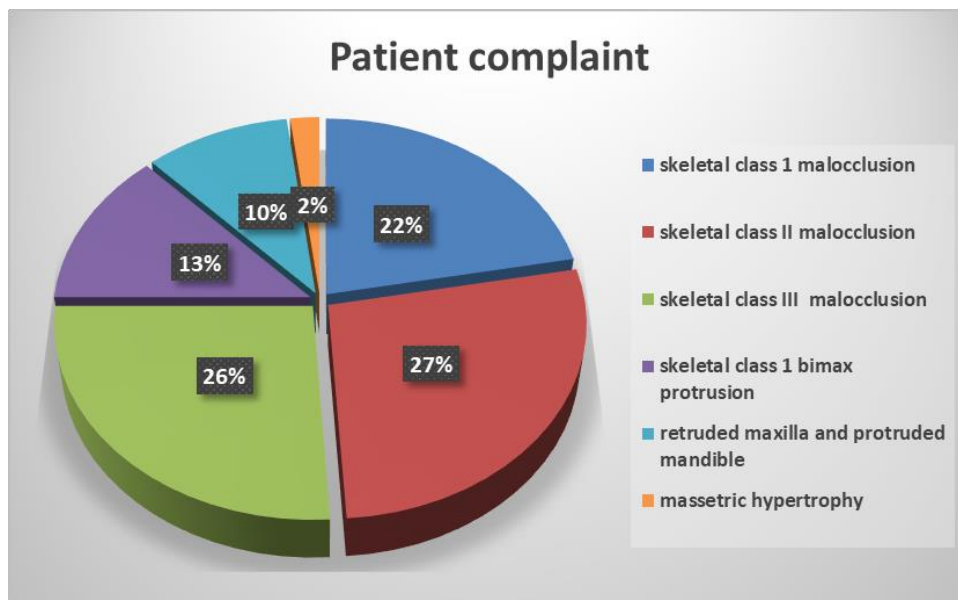
Inference : There is no significant difference

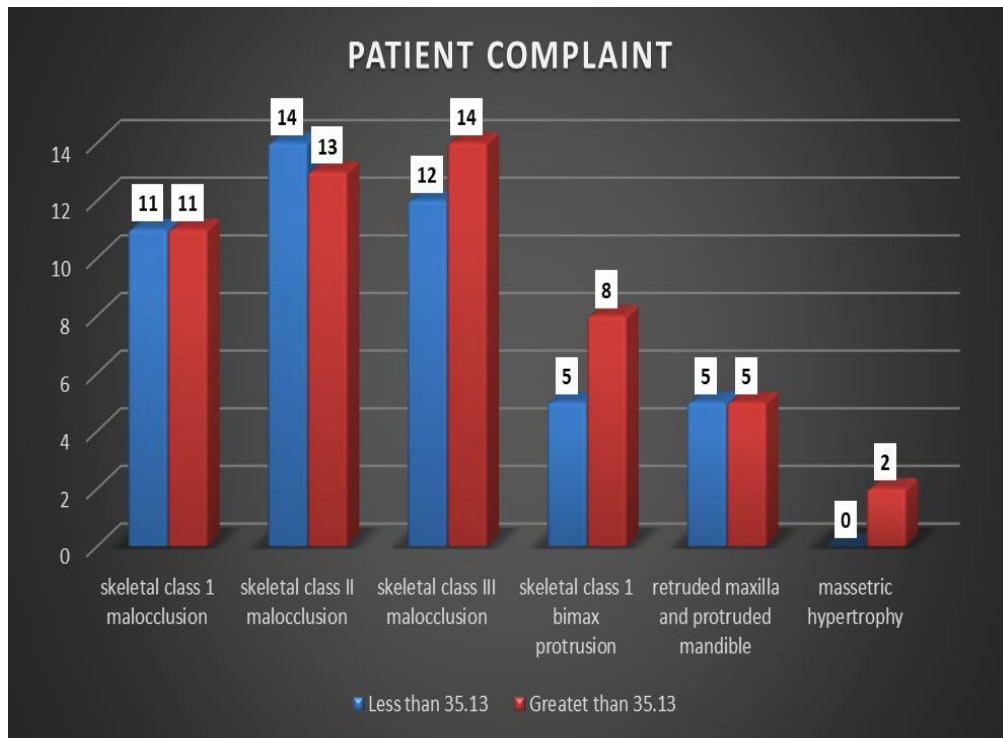
### Parents' marriage



1.9% of patients who had BDD had their parents' marriage as inter caste, 9/10 patients who had their parents marriage as consanguineous had BDD or 17 % of patients who had BDD had their parents marriage consanguineous. 43/83 (54%) had BDD has parents' marriage as same caste and religion Fischer's exact test was done, p value 0.0008 , there is significant association

### Patient complaint





22 patients were diagnosed with skeletal class 1 malocclusion and out of that 11 were screened positive for BDD , 27 were diagnosed with skeletal class II , out of that 14 were screened positive for BDD, 26 were diagnosed with skeletal class III and 14 were screened positive for BDD, 13 were diagnosed with skeletal class 1 bimaxillary protrusion and 8 were screened positive for BDD, 2 with masseteric hypertrophic diagnosed with BDD

Chi-square test

p-value : 0.772

There is no significant association

### III. Discussion

BDD is a mental disorder according to diagnostic statistical manual for mental disorder IV criteria. Total of 100 patients were taken as sample for this study, a validated questionnaire was given for patient, percentage above the cut off score were screened positive for body dysmorphic disorder. BDD questionnaire<sup>1</sup> had a specificity of 100% and sensitivity of 94% and inter reliability of 88 %<sup>24,25,26</sup>. 94% of patients diagnosed with BDD by BDDQ questionnaire had body dysmorphic disorder while counselling done by psychiatrist.

Aesthetic appearance is the most common concern among most of the maxillofacial patients<sup>2,11</sup>, in two separate studies in which orthognathic patient were interviewed pre-operatively over 60% of patients reports that their facial appearance had negative impact in personal life and social functioning<sup>3</sup>. Concaminant studies prove that patients could have other issue like fear anxiety, depression, obsessive compulsive disorders and extreme cases suicidal tendency also

In the present study we found that sex and parents marriage had significant association in patients with BDD, females tend to have BDD than males, most of patients who had their parents marriage as consanguineous had screened BDD positive . there was no correlation between age and BDD with mean age of 24.3 years, although study conducted by alkofahi et al<sup>31</sup> found that patient less than 33 years of age have more OCD symptoms than older. Most of the patients who were screened positive for BDD had skeletal class III malocclusion, but there is no significant correlation between patient complaint and BDD in this study.

The treatment aspect of BDD patients is controversial, it includes pre-operative counselling by psychiatrist , cognitive therapy, placebo trials and non-surgical approaches<sup>26,27,28,33,35</sup>. cainice et al<sup>34</sup> suggest that patients with BDD typically does not benefit from cosmetic procedures. Study conducted by finlay<sup>25</sup> et al shows improvement is psychological profile of BDD patients after surgery. The merit of this study is the identification of two new significant variable associated with BDD, Parents marriage and sex of the patient were found significant.

Such patients who could have body dysmorphic disorder should undergo pre-operative counselling. The patient should be educated about the severity of perceived defect and whether a surgical intervention is needed or not, the maxillofacial surgeon can take aid from psychiatrist for thorough assessment of patient and patient education

Hence surgery can be avoided with patient consensus for betterment of patient and surgeons to avoid litigations

**BDD questionnaire<sup>1</sup>**

1. Are you very concerned about the appearance of some part of your body, which you consider especially unattractive?

Y N

If no, please continue with question 5.

If yes, please continue at the next question.

2. Do these concerns preoccupy you? That is, you think about them a lot and they're hard to stop thinking about ?

Y N

3. What are these concerns? What specifically bothers you about the appearance of these body parts?

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4. What effect has your preoccupation with your appearance of these body parts had?

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5. Has your defect often caused you a lot of distress, torment or pain? How much? (circle best answer)

1	2	3	4	5
No distress	Mild, and not too disturbing	Moderate and disturbing but still manageable	Severe, and very disturbing	Extreme, and disabling

6. Has your defect caused you impairment in social, occupational or other important areas of functioning? How much? (circle best answer)

1	2	3	4	5
No distress	Mild, and not too disturbing	Moderate and disturbing but still manageable	Severe, and very disturbing	Extreme, and disabling

7. Has your defect often significantly interfered with your social life? (circle best answer)

1	2	3	4	5
No distress	Mild, and not too disturbing	Moderate and disturbing but still manageable	Severe, and very disturbing	Extreme, and disabling

8. Has your defect often significantly interfered with your school work, your job, or your ability to function in your role? (circle best answer)

1	2	3	4	5
No distress	Mild, and not too disturbing	Moderate and disturbing but still manageable	Severe, and very disturbing	Extreme, and disabling

9. Are there things you avoid because of your defect?

Y N

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10. How dissatisfied have you been with your overall appearance? (circle best answer)

1	2	3	4	5
No dissatisfaction	Minimal dissatisfaction	Moderate dissatisfaction	Severe dissatisfaction	Extreme dissatisfaction

11. Do you feel ashamed of your appearance?

Y N

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12. How frequently have you checked-out your appearance feature? (circle best answer)

1	2	3	4	5
Never	Sometimes	Regularly	Often	Very often

13. How much did you deliberately do to hide your appearance feature? (circle best answer)

1	2	3	4	5
Never	Sometimes	Regularly	Often	Very often

14. Are you spending more time on your appearance than you actually want to? (Circle best answer)

1	2	3	4	5
Never	Sometimes	Regularly	Often	Very often

15. How frequently have you tried to get reassurance from someone that your appearance feature is not as bad as you think it is? (circle best answer)

1                      2                      3                      4                      5  
Never                Sometimes            Regularly            Often                Very often

16. How attractive physically do you feel other people thought you were? (circle best answer)

1                      2                      3                      4                      5  
Attractive                Slightly                Moderately            Rather                Extremely  
                                  unattractive            unattractive            unattractive            unattractive

17. Do other people think you are worrying a lot about your appearance?

Y                      N

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18. How often have you felt that other people were noticing or paying attention to your appearance feature? (circle best answer)

1                      2                      3                      4                      5  
Never                Sometimes            Regularly            Often                Very often

19. Do you think your life would be completely different after surgery to correct your appearance feature?

Y                      N

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20. Does the appearance feature account for many problems in life?

Y                      N

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