

A Cross Sectional Study to Assess Awareness & Knowledge Regarding Body Dysmorphic Disorders (BDD) among Students of a Medical College in Central India

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ABSTRACT

BDD (Body-dysmorphic disorder) is a somatoform psychological condition, within which the person forms a negative self-image with a self-perceived defect. Diagnosis of BDD can be missed unless it is specifically asked to cancel out other differentials. BDD though not very rare often gets undiagnosed leading to it becoming a severe disability and is often associated with certain other conditions like OCD, anxiety, depression. With the advancement of technology, so has the use of social media, to the point where the typical individual spends the majority of their time on their devices on social-media platforms. It was common thinking that social media was the root cause for BDD that might not be true but it sure as one of the leading cause for causing BDD, Social media easily creates an unnatural body image for people especially adolescents who are easily influenced into thinking if they don't have a certain physique they are not worthy of anything and leading to formation of poor body image in the minds of the patient hence leading to BDD. It is commonly found to be more common in females as compared to males. The diagnosis is made by following DSM V criteria of BDD. There are other diagnostic tools like screening measurement tools, severity measures, etc. Contrary to popular opinion Cosmetic surgery is not an absolute treatment for BDD; actually cosmetic surgery is contraindicated in patients with BDD. Treatment basically depends upon one of the 2 methods or a combination of two, CBT (cognitive based therapy) and SRI (serotonin reuptake inhibitor).

Objective: The proposed study is planned to assess the awareness regarding Body dysmorphic disorder, its related condition, prevalence and treatment among medical students.

Methods: A knowledge, awareness and perception study based on an online survey via Google form.

Expected result: The analysis of data and appropriate statistical tests would give the result.

Key words: Body dysmorphic disorder, OCD, Social anxiety, BDD diagnosis, BDD treatment, Medical students

HOW TO CITE THIS ARTICLE: Raghav Janaswamy, Pramita A Muntode, Guddi Laishram, Sunita Patel, A Cross Sectional Study to Assess Awareness & Knowledge Regarding Body Dysmorphic Disorders (BDD) among Students of a Medical College in Central India, J Res Med Dent Sci, 2022, 10 (10): 221-226.

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Received: 03-Oct-2022, Manuscript No. jrmds-22-77133;

Editor assigned: 05-Oct-2022, PreQC No. jrmds-22-77133(PQ);

Reviewed: 19-Oct-2022, QC No. jrmds-22-77133(Q);

Revised: 24-Oct-2022, Manuscript No. jrmds-22-77133(R);

Published: 31-Oct-2022

INTRODUCTION

BDD (Body dysmorphic disorder) occasionally called dysmorphophobia is a widespread yet one of the most undiagnosed somatotype form of psychological disorders, the condition is present anywhere between

moderately to highly impairing disorder. A BDD diagnosis can be missed unless it is specifically requested, in order to cancel out other differences in the case, this is what makes BDD such a dangerous condition as easily it might be presented in a patient just as easily it can be misdiagnosed as the vast majority of differential diagnosis that shares more than half of the symptoms of BDD is just as easily presented or is just as common and hence quite commonly misdiagnosed. Another cause of such misdiagnosis or also being undiagnosed is lack of awareness as well as knowledge regarding the said conditions and certain ignorance shown by people who might consider this serious condition as nothing more than an act for attention. Body dysmorphic disorder explained by the fourth edition of the diagnostic and

statistical manual of psychology (DSM-IV, American psychiatry association, 1994) as a concern with some imagined physical flaw or a dramatic exaggeration of a minor physical flaw [1], the DSM V considers BDD as a somatoform disorder in the obsessive compulsive spectrum [2]. Though considered quite common but on a normal clinical settings it is very often gone undiagnosed that is because BDD is quite often associated with various other conditions such as OCD, Depression, Social phobia, anxiety, substance abuse as it shares much of its symptoms with the said conditions so the chances of BDD getting misdiagnosed also increases. BDD is often lumped together with eating disorders, but they're quite different BDD is a somatoform disorder and can or cannot be related to a negative attitude towards food, while eating disorders like anorexia and bulimia are always associated with negative attitudes towards food.

Comparisons with other related conditions

BDD and OCD

Affective disorders such as social anxiety disorder and body dysmorphic disorder have their own trigger factors and etiologies, but they can overlap in such a way that one of them helps or causes the other. BDD can very well be considered to be a variety of OCD, as the symptoms are somewhat similar, in BDD the patient has an 'obsession' over his self-perceived defects and makes various 'compulsions' in life to avoid them. A such study in which a longitudinal study was conducted between subjects with BDD As well as OCD (obsessive & compulsive disorder), BDD (body dysmorphic disorder), and co morbid BDD (body dysmorphic disorder) body dysmorphic disorder and co morbid BDD/OCD were found to be comparable in terms of demographics between OCD(obsessive compulsive disorder) and body dysmorphic disorder A significant difference in insight and delusionalness was found between BDD sufferers, as well as a higher suicidal tendency in OCD sufferers as opposed to BDD sufferers [3]. The differentiating factor between OCD and BDD is that a person with BDD usually has an obsession towards his 'self-perceived flaws' while persons with OCD common obsessions are focused on other external sources such as neatness, order of things, particularity, and one of the most common is the fear of coming in contact with contamination also commonly called as being 'germaphobe'.

BDD and depression

BDD and depression usually goes hand in hand, the obsessive and the compulsive nature of BDD can precipitate depression and vice versa, a research report came to a result that patients long-standing atypical depression had significant higher rates of BDD(14.4%) compared to patients with typical depression(5.1%) [4]. Long standing case of BDD may precipitate to Depression of either type atypical or typical leading to deterioration of the pre-existing condition, hence depression is considered as one of the lethal comorbidity of the said condition. Proper counseling and therapy are a must for treating depression, also combating the cause of acquired

depression here, BDD is also of utmost importance as not confronting the root cause issues a chance of recurrence of depression. CBT and SSRI therapy is beneficial for both depression and BDD.

Anxiety and social anxiety/social phobia

Anxiety (even social anxiety/phobia) and BDD(body-dysmorphic disorder)can overlap in such a way that one of them facilitates the other or becomes the cause of the other. In individuals with BDD, 12-68.8% also has Social anxiety disorder/phobia, while individuals with Social anxiety disorder 4.8-12% also have BDD [5]. The average age when the Social anxiety disorder/phobia begins to develop is approximately 14 [6,7], while BDD (body dysmorphic disorder) usually begins around the age of 16 years [8,9], which indicates a nearly similar time of onset in both of the conditions. Since the body undergoes so many changes during puberty, anyone suffering from one of the conditions listed above is very likely to suffer from another.

BDD (Body-dysmorphic disorder) and correlated substance abuse

Substance abuse problem is one of the many comorbid disorders with body dysmorphic disorder, causing unnecessary stress and worry for the individual. The person affected with the condition BDD (body dysmorphic disorder) might seek shelter in abuse of substances such as alcohol, etc.to numb his or her obsessive tendencies or to keep himself or herself distracted. This behavior tends to lead to development of a substance abuse disorder. The onset of the conditions is usually mid puberty which is an highly influential age, any sort of compensation for the condition that a patient finds in various addiction liable substances such as alcohol, tobacco, Marijuana, etc. this temporary comfort that the patient receives from such substances and their high addiction liability becomes a new comorbid condition for the patient in the form of substance abuse disorder. Furthermore this substance abuse disorder can even precipitate all mentioned comorbidities which makes the prognosis of BDD(Body-dysmorphic disorder) even worse than it would've been in earlier stages of the condition.

BDD (Body-dysmorphic disorder) and social media

With the advancement of technology, so has the use of social media, to the point where the typical individual spends the majority of their time on their devices on social-media platforms. It was common thinking that social media was the root cause for BDD that might not be true but it sure as one of the leading cause for causing BDD, Social medial easily creates an unnatural body image for people especially adolescents who are easily influenced into thinking if they don't have a certain physique they are not worthy of anything and leading to formation of poor body image in the minds of the patient hence leading to BDD.A study was carried out the frequency of body-dysmorphic disorder and its factors among young social media users [10], according to the study, majority of the subjects(62.3%)spent over

4 hours browsing through the social media applications, the highest time spent in minutes/day was of Snap chat followed by Instagram, and the same result was for the application opened times/day. The rate of BDD found in participants using social media according to the study was 4.2% which is considered to be higher than the average rate of cases of BDD worldwide which stands at a mere 2.2% [10].

Common clinical features of BDD

People with BDD have an obsession on a 'self-perceived defect'.

Their self-description is as if they are 'monsters', 'hideous', 'ugly', etc.

Concerns are usually around the face (easily visible part), but can be anywhere.

Average time consumed by the patient obsessing over the 'defect' is 3-8 hours in a day.

It's not uncommon for BDD sufferers to experience rejection anxiety, low self-esteem, shame, and humiliation feelings.

Diagnosis of BDD can be made by

This condition is diagnosed by a psychiatrist on the basis of: psychological assessment of risk factors; thoughts; feelings; and behaviour surrounding the person's negative self-image; personal; social; and familial history.

A list of symptoms included in the Diagnostic and Statistical Manual of Mental Disorders, DSM-5, issued by the American Psychiatric Association [11].

Criteria listed by DSM-V for the diagnosing BDD [11]

Disorder class: Obsessive & compulsive and related disorders (earlier it was under the somatoform disorders).

Criteria 1: Preoccupation with a perceived problem or issues or physical faults or blemishes that aren't obvious to others or appear insignificant to them.

Criteria 2: People with this disorder have engaged in repetitive behaviours (such as mirror checking, excessive grooming and skin plucking) as well as mental acts (such as comparisons of one's appearance to that of others) in response to appearance worries at some time during the disorder's course.(this criteria was not present in DSM4)

Criteria 3: The preoccupation can cause clinically substantial distress or impairment in social, vocational, or other aspects of functioning.

Criteria 4: A person's obsession with appearance cannot be explained by concerns about body fat or weight, even if they meet diagnostic criteria for an eating disorder.

Specify if:

With muscle dysmorphia: The person is preoccupied with the notion that his or her body is too tiny or lacks appropriate muscle mass. This specifier is employed even if the person's attention is diverted to other parts

of the body, which is common.

Specify if:

Indicate your knowledge of body dysmorphic disorder beliefs (e.g. "I look ugly" or "I look deformed").

With good or fair insight, the person realizes that the body-dysmorphic disorder beliefs are either categorically false or may or may not be false.

With inadequate insight, the individual believes that the body-dysmorphic disorder beliefs are most likely correct.

With a lack of insight/delusional views, the person is certain that his or her body dysmorphic disorder beliefs are correct.

Prevalence and gender differences and body dysmorphic disorder

Many people are misdiagnosed with BDD for a variety of reasons, such as the patient's tendency to hide his problem for fear of being stigmatized, and the condition's many overlapping features with other conditions such as anxiety, OCD and others. This leads to a low perception of BDD as a whole. Although BDD (body dysmorphic disorder) affects both men and women equally if external factors such as social media and the unnatural body image established by it are taken into account, women are more likely to be affected in many other contexts, particularly culturally. Due to the constant social pressure to be 'beautiful,' women are more susceptible than men are to developing BDD. If they do not conform to the social norm, society can be harsh towards them. These long-standing tandem conditioning could unconsciously lead to the development of BDD in the affected women. Even region to region there is a significant prevalence of BDD in women while male are generally less affected. In a study done in 2008, it was discovered that out of 157 individuals, males were n=67 (42.9 percent), females were n=89 (57.1 percent), and out of the total (156), 123 (78.8%) of the subjects were dissatisfied with their bodies (88.8 percent vs. 76.1 percent). Clinical BDD was found in 5.8% (9 out of 156) of the participants, with a ratio of males to females of 1.7 [12].

Treatment modalities for BDD

There are two primary treatment methods for BDD, differentiated by the severity of BDD [13].

Cognitive Based Therapy (CBT)

A study that examined the effectiveness of CBT to non-CBT therapy measures such as anxiety management (AM). In this study, 46 people with BDD were randomly assigned to either of the aforementioned treatment modalities. The results were estimated after 12 weeks of regular therapy (either CBT or AM) on the subjects. CBT was considerably better than AM in reducing the intensity of BDD, enhancing quality of life, and producing a better insight [14].

SRI (Serotonin Reuptake Inhibitor)

The SRI medications also consists of SSRI (selective

serotonin reuptake inhibitor) (eg. fluoxetine, sertraline, paroxetine, citalopram, escitalopram) these are a class of antidepressant, also clomipramine a TCA(tricyclic antidepressant) is an effective serotonin reuptake inhibitor.

Rationale

Body-dysmorphic disorder is a rare disorder in disguise, and has an extreme potential to get severe to the point of it being fatal to the patients, and yet it is one of the most undiagnosed conditions. Hence, an awareness regarding body dysmorphic disorder is very crucial for budding doctors to have, so if a case of BDD is presented to a doctor in the future, it should not get undiagnosed and untreated.

Aim

To assess the awareness & knowledge regarding Body dysmorphic disorders among medical students.

Objective

To find the number of medical students aware about the condition- body dysmorphic disorder (BDD).

The goal of this study is to see how well medical students knew about BDD.

To generate awareness among the medical students regarding BDD.

METHODOLOGY

Study setting

Jawaharlal Nehru Medical College, Sawangi, Wardha.

Study type

A descriptive cross-sectional survey.

Study method

The survey will be conducted via a virtual platform using pre structured Google forms and distributed digitally among the medical students. The study method will be in the form of a computerized self-administered questionnaire, to produce quantitative data that will be analyzed using statistical computerized programs.

Study participants

Expected number of participants is 100 students of a medical college from central India.

Selection criteria

Final year MBBS (Part I) students.

Inclusion criteria

Current Students of final MBBS.

Willing to participate in the study.

Exclusion criteria

Students of other MBBS batches.

Data collection tool

The questionnaire is based on Knowledge and Attitude of Body dysmorphic disorder will be utilized as a tool for assessment among medical students. This is a self-prepared questionnaire based on DSM V criteria for Body dysmorphic Disorder [11].

Information collected through the questionnaire contains

Knowledge regarding Body dysmorphic disorder.

Awareness regarding Body dysmorphic disorder.

Perceptions regarding Body dysmorphic disorder.

Sample size

100.

Sampling procedure

Using linear systematic random sampling method, the benefits of systematic sampling are:

For researchers, creating, conducting, and analyzing samples is straightforward and convenient.

You can depict the population more quickly and easily by not numbering each sample member.

As a result of careful member selection, no bias has been introduced into the samples produced..

As a result of systematic sampling, there is no risk of creating highly biased clusters as there is with other probability sampling methods such as cluster sampling and stratified sampling or non-probability methods such as convenience sampling.

The risk factor associated with this sampling procedure is relatively low.

An even distribution of individuals in a sample makes this sampling strategy useful when there are many members in a group.

Sampling procedure

Using Linear systematic sampling & designating students as per their official allotted Roll. Nos.

Sample size n: 50

N=201

Sampling interval (k)=N/n=201/50=4.02~4

Random number (r) between 1-4 (including 4) = 4

Samples -r+k=4+4=6, 6+4=10, 10+4=14

Samples calculated are:

6, 10, 14, 18, 22, 26, 30, 34, 38, 42, 46, 50, 54.

58, 62, 66, 70, 74, 78, 82, 86, 90, 94, 98, 102, 106, 110, 114, 118, 122, 126, 130, 134, 138, 142, 146, 150, 154, 158, 162, 166, 170, 174, 178, 182, 186, 190, 194, 198, 01.

Data analysis

Using SPSS software, v27.

Scope

Assessment of knowledge regarding BDD will give us insight into the information the participants have about the disorder and also plan an awareness session to identify students suffering from BDD and address the matter promptly.

Limitations

Limited scope of study due to small participating groups. A large scale study would be beneficial in providing better insight.

Implications

The study will raise a curiosity regarding Body dysmorphic disorder among the students and which in turn would raise awareness regarding body dysmorphic disorders among them.

RESULTS

The analysis of the data and appropriate statistical analysis will contemplate the result.

DISCUSSION

The study conducted is to provide an insight into whether the medical students are aware of Body-Dysmorphic Disorder(BDD) or not, on the basic of beforehand knowledge not more than 10% of the subjects would be aware of BDD, further results found after the completion of the study would provide a comparison for said hypothesis. A number of related studies were reviewed [15-20].

Bouman, et al. Despite the fact that this condition is contraindicated for cosmetic surgery, the majority of patients with body dysmorphic disorder seek and often receive some sort of cosmetic procedure, including plastic surgery. As it turns out, a majority of participants in this study were familiar with the diagnostic criteria and clinical presentation of body dysmorphic disorder [15]. The results from the questionnaire would be beneficial in identifying whether the students consider cosmetic surgery to be the treatment for BDD(body dysmorphic disorder) or not.

CONCLUSION

The conclusion could be drawn after the completion of the proposed study.

ETHICS COMMITTEE APPROVAL

Ethical clearance will be obtained and confidentiality will be maintained throughout the research and the information of the subjects will be accessible to the researchers. The study will be conducted after due clearance from the institutional ethics committee (IEC) (DMIMS-DU).

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