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Psychosomatic disorders: The challenge to meet out in clinic

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Abstract

Psychosomatic disorder is condition in which psychological stresses adversely affect physiological (somatic) functioning to the point of distress. They can cause disruptions in daily functioning, relationships, work, school, and other important domains. With appropriate diagnosis and treatment, however, people can find relief from their symptoms and discover ways to cope effectively. The MEDLINE/PubMed database was searched using certain combinations of keywords related to the topic. The search revealed that medical and dental practitioners are concerned with the emotional and psychological state of the patient, for it is an essential component of treatment and the success of the treatment often depends on the emotional state of the patient. In the present paper, various psychosomatic disorders, their classification, diagnosis and management has been discussed.

Keywords: Psychosomatic disorders, Diagnosis, Management, Dentistry.

Introduction

In the last few decades there has been unprecedented rise in the incidence of psychiatric disorders worldwide which is a major public health problem.

Modern medicine is based on the concept of the independence of the body and mind, and current clinical medicine has been subdivided into individual organ based medical practice. However, the clinical course and prognosis of physical diseases is deeply related to psychological, social, behavioral, and environmental factors. Whereas in modern medicine in which specialized psychiatrists aim to treat specific mental disorders, psychosomatic medicine (PSM) seeks "unification of mind and body" with a focus on the mindbody connection (psychosomatic relationship).[1]

The concept of psychological medicine, which dates back to the origin of medicine itself, was included in the first edition of "Diagnostic and Statically Manual, Mental Disorder" (DSM-1) in 1952 as "Psychosomatic Disorders" and in DSM-II, published in 1968, as Psycho Physiological Autonomic and Visceral Disorder. In 1980's DSM-III has renamed it has a "Psychological Factor Affecting the Physical Conditions".[2]

DSM-II, (1968) defines Psychosomatic Disorders as psychosomatic symptoms that are caused by emotional factors and involves a single organ system, usually under autonomic nervous innervations.[2,3]

The term psychological disorder, mental disorders or psychiatric disorders are patterns of behavioral or psychological symptoms that impact multiple areas of life. These disorders create distress for the person experiencing these symptoms.

Psychosomatic disorder, also called psychophysiologic disorder, is condition in which psychological stresses adversely affect physiological (somatic) functioning to the point of distress. It is a condition of dysfunction or structural damage in bodily organs through inappropriate activation of the involuntary nervous system and the glands of internal secretion. Thus, the psychosomatic symptom emerges as a physiological concomitant of an emotional state.

These symptoms may cause significant distress or impaired social functioning.[4]Furthermore, these physical symptoms cannot be fully explained by organic disease and psychosocial problems are denied.[5]

Mouth is the mirror of the body says Williams Osler, as mouth reflects many systemic diseases. Psychosomatic disorders can affect the oral cavity since the oral environment is related directly or symbolically to the major human instincts and passions and is charged with a high psychological potential.[6]

Psychosomatic disorders may be due to several biochemical disorders involving neurotransmitters in the brain, incomplete connections with in the oral region and undefined complaints due to cognitive processes in higher centers of the brain.[7]Studies have estimated the prevalence rate of mental disorders in India to be about 65.4/1000 population.[8]

The dentist is concerned with the emotional and psychological state of the patient, for it is an essential component of treatment and the success of the treatment often depends on the emotional state of the patient. It is thus important for the dentist to be aware of practical- problem- oriented approach that helps in patient management.[9,10] Oral lesions not related to psychosomatic disorders, if subjected to antipsychotic measures, might lead to further complications.[11] Dentists may consider dental treatment successful when they meet appropriate technological standards. However, patients evaluate the treatment from the point of view of their own satisfaction,[12] which is affected by their physical as well as emotional state.

Classification

Psychiatric disorders have traditionally been classified into two main groups namely organic and functional. In organic disorders, known physical etiology can be established like in dementia or delirium. In functional disorders such as schizophrenia, constitutes the large majority of psychiatric illness in which no physical factors were present. Anxiety and depression are universally experienced neurotic symptoms, included under functional disorders.[13]

The DSM-IV-TR[4] defines 7 distinct stomatoform disorders:

1. **Somatization disorder:** a polysymptomatic disorder characterized by a combination of pain, gastrointestinal, sexual and pseudoneurological symptoms.
2. **Undifferentiated somatoform disorder:** is consistent with unexplained physical complaints that are below the threshold for diagnosis of somatization disorder.
3. **Conversion disorder:** is consistent with unexplained symptoms affecting voluntary motor or sensory function that suggest a neurologic or other general medical condition.
4. **Pain disorder**: occurs when pain is the predominant focus of clinical attention and psychological factors have an important role in its onset, severity etc.
5. **Hypochondriasis:** is preoccupation with the fear of having a serious disease.
6. **Body dimorphic disorder**: is the preoccupation with an imagined or exaggerated defect in physical appearance.
7. **Somatoform disorder:** not otherwise specified: is a disorder with stomatoform symptoms that do not meet the criteria for any specific stomatoform disorders.

Some of the major categories of disorders described in the Diagnostic and Statistical Manual of Mental Disorders (DSM) is listed as under:

1. Neurodevelopmental disorders are those that are typically diagnosed during infancy, childhood, or adolescence. Eg.: Intellectual disability, global developmental delay, communication disorders, autism spectrum disorder, attention-deficit hyperactivity disorder.
2. Bipolar and related disorders is characterized by shifts in mood as well as changes in activity and energy levels. The disorder often involves experiencing shifts between elevated moods and periods of depression. Eg.: Mania and depressive episodes.
3. Anxiety disordersare those that are characterized by excessive and persistent fear, worry, anxiety and related behavioral disturbances. Eg.: Generalized anxiety disorder, agoraphobia, social anxiety disorder, specific phobias, panic disorder, separation anxiety disorder.
4. Trauma and stressor-related disorders involve the exposure to a stressful or traumatic event. Eg.: Acute stress disorder, adjustment disorders, post-traumatic stress disorder, reactive attachment disorder.
5. Dissociative disorders are psychological disorders that involve a dissociation or interruption in aspects of consciousness, including identity and memory.eg.: Dissociative amnesia, dissociative identity disorder, depersonalization/derealization disorder.
6. Somatic symptom and related disorders are a class of psychological disorders that involve prominent physical symptoms that may not have a diagnosable physical cause. Eg.: Somatic symptom disorder, Illness anxiety disorder, conversion disorder, factitious disorder.
7. Feeding and eating disordersare characterized by obsessive concerns with weight and disruptive eating patterns that negatively impact physical and mental health. Eg.: Anorexia nervosa, Bulimia nervosa, rumination disorder, binge-eating disorder.
8. Sleep - Wake disorders involve an interruption in sleep patterns that lead to distress and affects daytime functioning. Eg.: Narcolepsy,Insomnia disorder, hypersomnolence, breathing-related sleep disorders, parasomnias, restless legs syndrome.
9. Disruptive, impulse-control, and conduct disorders involve an inability to control emotions and behaviors, resulting in harm to oneself or others. Eg.:Kleptomania, pyromania, intermittent explosive disorder, conduct disorder, oppositional defiant disorder.
10. Substance-related and addictive disorders involve the use and abuse of different substances such as cocaine, methamphetamine, opiates and alcohol. Eg.:cocaine, methamphetamine, opiates and alcohol dependency, gambling.
11. Neurocognitive disorders are characterized by acquired deficits in cognitive function. These disorders do not include those in which impaired cognition was present at birth or early in life. Eg.: Delirium etc.
12. Personality disorders are characterized by an enduring pattern of maladaptive thoughts, feelings, and behaviors that can cause serious detriments to relationships and other life areas. Eg.: Antisocial personality disorder, avoidant personality disorder, borderline personality disorder, dependent personality disorder, obsessive-compulsive personality disorder, paranoid personality disorder, schizoid personality disorder etc.

Thorakkal Shamim has proposed a simple working type classification[14] and a modified classification[15] for the psychosomatic disorders of the oral cavity.

The classification includes

a) **Pain related disorders**: Pain related disorders include disorders of the orofacial region presenting with vague pain attributed to psychological stress. This category includes
1. Myofascial pain dysfunction syndrome (MPDS)
2. Atypical facial pain
3. Atypical odontogenic pain
4. Phantom pain.

b) **Disorders related to altered oral sensation**: Disorders related to altered oral sensation are disorders in which the clinical presentation of the patient may be a persistent intraoral burning sensation. This category includes
1. Burning mouth syndrome
2. Idiopathic xerostomia
3. Idiopathic dysgeusia
4. Glossodynia
5. Glossopyrosis.

c) **Disorders induced by neurotic habits:**Disorders induced by neurotic habits are disorders induced by parafunctional activity of the soft and hard tissues of the oral cavity. This category includes dental and periodontal diseases caused by
1. Bruxism
2. biting of the oral mucosa (self-mutilation).

d) **Autoimmune disorders**: Autoimmune disorders are common dermatologic diseases with oral manifestations with psychological stress as an etiologic factor in the disease progression. This category includes
1. Recurrent aphthous stomatitis
2. Lichen planus
3. Psoriasis
4. Mucous membrane pemphigoid
5. Erythemamultiforme.

e) **Disorders caused by altered perception of dentofacial form and function**: includes
1. Body dysmorphic disorder (BDD) is a common psychological syndrome in dental practice which results in patients seeking treatment for an imagined defect in appearance.[16]
2. Phantom bite

f) **Miscellaneous disorders**: Miscellaneous disorders comprise an unclassified category in which the role of stress is important in the disease progression. This category includes
1. Recurrent herpes labialis
2. Necrotizing ulcerative gingivostomatitis
3. Chronic periodontal diseases
4. Cancerophobia
5. Delusional halitosis

Diagnosis

The dentist who treats patients with chronic oral diseases, must be able to recognize and obtain appropriate treatment for the depressed patient, if the dentist is to succeed in managing the patient's oral problem.[17] Unidentified psychosomatic disorder can lead to the failure of even a well designed and well-executed treatment plan as the patient will notbe satisfied with the outcome or even may complain of worsened symptoms. The challenge is to recognise somatoform disorders to avoid initiating treatment for patients whose symptoms cannot be helped by dental or oro-facial treatment.

Psychological and emotional disorders usually seen by the dentists include[18]
1. **Anxiety:** Everyone is anxious to some extent with anything new happening. Some degree of anxiety will be seen in most of the patients in the dental surgery.
2. **Depression:** This is often disguised as a somatic complaint such as pain, bad taste or an inability to adjust to dental treatment.
3. **Conversion hysteria**: By this means, people convert the anxiety from emotional conflicts into somatic symptoms such as pain, muscle weakness, or sensory disturbances, or they reproduce a symptom which they had at some time in the past.
4. **Body image disturbance:** The mouth is the most emotionally charged area of the body and therefore frequently involved in body image disturbances. Any alteration to the patient's mouth is a body change to which they must adapt. Until they do, anxiety will be present.

Recognition of Patients with Somatoform Disorders: According to Brodine&Hartshorn, the hallmark of stomatoform disorders is 3-fold: oranic symptoms that are inconsistent with physical findings, history of precipitating event after which the symptoms began and unintentional symptoms.[19]

The first step in recognition of stomatoform disorders is exclusion of all general medical / dental conditions that fully account for physical symptoms. Substance induced causes must also be discounted.

Next is the identification of the features common to most of the stomatoform diseases. The most common characteristics include plausible history but symptoms not consistent with findings, history of symptoms beginning with single precipitating event, history of anxiety/depression, extended duration of symptoms, poorly localized pain, pain varying in intensity etc. Thus, a thorough clinical examination is mandatory.

Thirdly, recognize any unintentional symptoms. Some patients present with symptom of organic disease concurrent with nonorganic origin. The best approach for this type is to provide appropriate treatment for all symptomatic organic disease. If symptoms persist, then somatoform disorder should be part of differential diagnosis.

Uezato A. et al[20] suggested an oral dysesthesia rating scale to quantitatively evaluate symptoms of oral dysesthesia and the consequent functional impairement. It was designed to cover various symptoms presented by patients by classifying them into seven main categories. They found it to be a reliable tool for

clinical evaluation and follow up as well as clinical research.
It includes:

A) Symptom severity scale
A1) Feeling of foreign body
A2) Exudation
A3) Squeezing-pulling
A4) Movement
A5) Misalignment
A6) Pain
A7) Spontaneous thermal sensation or taste

B) **Functional impairement scale** assess the degree of impairement of
B1) Eating
B2) Articulation
B3) Work
B4) Social activities

C) **Visual analog scale** assess
C1) Overall subjective severity of symptoms
C2) Changes in severity of symptoms.

For A & B, the severity was measured on a scale of 0-5 (0: none, 1: suspected, 2: mild, 3: moderate, 4: severe, 5: extremely severe.)

For C1 the scale is 100mm long with 0mm as no symptoms & 100 mm as extremely severe symptoms and for C2 the scale ia 100mm with 0mm as "worse", 50mm as "no change" & 100mm as "better"

Management

No curative or ameliorative treatment has been found for any of the somatoform disorders except conversion order symptoms.[5] psychiatrists manage the balance of the somatoform disorders by focusing on coping rather than curing.

Somatoform disorders should be ruled out before initiation of dental treatment. If treatment has already begun when signs of possible somatoform disorder manifest, then treatment may be temporarily suspended.

Many patients suffering from psychosomatic diseases respond to a combination of drug therapy, psychoanalysis, and behaviour therapy. In less severe cases, patients can learn to manage stress without drugs. The Pharmacologic management includes[3,21]:

1. Antianxiety drugs–Benzodiazepines like Diazepam (5 to 10 mg/day), Alprazolam. (0.25 to 0.5 mg/day)
2. Antidepressants–Monoaminoxidase inhibitors: Phenelzine (15 to 90mg/day), Isocarboxazid (10 to 40 mg/day)
3. Tricyclic Antidepressants – Amitriptyline (10 to 100 mg/day), Nortriptyline (25 mg/day)
4. Sedatives/Hypontics–Barbiturate (15 to 20 mg)

Behavioral/relaxation techniques are

1. **Relaxation through yoga or meditation:** Relaxation is a technique to improve the various symptoms by relaxing the body, including progressive muscle relaxation, autogenic training, and breathing.
2. **Hypnosis:** Hypnosis as a traditional healing method, in its more recent development, has generated a multitude of techniques. These serve as practical tools which can be combined with other therapy techniques for the treatment of medical, psychosomatic and neurotic disorders.[22]
3. **Biofeedback:** Biofeedback is a form of treatment to improve physiological functioning by the use of monitoring the equipment that provides the patient with realtime information regarding specific symptom-related biological response. Biofeedback, particularly electromyography biofeedback, is frequently used for temporomandibular disorder. In this treatment, patients practice keeping their muscle (e.g. masseter or temporal muscles) relaxed though monitoring their muscle activity.
4. **Cognitive-behavioral therapy:** Cognitive behavioral therapy (CBT) is a psychological intervention that has been applied for various healthrelated issues, including psychiatric diseases such as depression and anxiety, and for physical symptoms, such as pain disorders.[23,24] CBT has been proven more effective than other means of psychotherapy for the treatment of psychiatric disorders.[25] The basic premise of CBT is that physical or emotional problems are difficult to change directly, so CBT targets these problems by changing cognitions and behaviors that are contributing to the physical or emotional problems. CBT is recommended as a therapeutic approach for Burning Mouth Syndrome.[33] Recently, CBT has begun to be applied for psychosomatic problems in the dental setting, and the effectiveness of this therapy on these problems has been confirmed in various studies.[26-32]

Conclusion

Psychological disorders can cause disruptions in daily functioning, relationships, work, school, and other important domains. With appropriate diagnosis and treatment, however, people can find relief from their symptoms and discover ways to cope effectively.

In addition to their dental problems, this group of the population suffering from psychosomatic disorders present with emotional and psychological problems. It is the responsibility of every dentist to be involved in the search for improvements that will benefit their patients. If the public is to enjoy the advances of scientific research, the dentist must be aware of patients' thoughts and feelings as well as their mouths.[34]

The well-informed dentist needs openness and communication skills. They should have knowledge about neuroleptics and antidepressant medications and the ability to recognize and refer patients needing psychological help.[35]

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