

Psychosomatic Disorders an Overall Review on Oral Manifestations

Shibalika Dash*

Undergraduate Trainee, Institute of Dental Sciences, Siksha O Anusandhan (Deemed To Be) University, Bhubneswar, Odisha, India

Guided by: Satya Ranjan Mishra

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***Corresponding author:** Shibalika Dash, Undergraduate Trainee, Institute Of Dental Sciences Siksha O Anusandhan (Deemed to be) University, Bhubneswar, Odisha, India. E-mail: shibalikadash16@gmail.com

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A B S T R A C T

Psychosomatic disorders encompass conditions where physical symptoms arise from mental or emotional origins, often rooted in deep thoughts and painfulness with alarming triggers to the body. Factors when not recognized can lead to body diseases through hysteria. Notably oral para oral surface exhibit consequences of psychosomatic disorders. Psychosomatic disorders severely affects the normal physiological activities of body leading to various psychosomatic diseases. The oral cavity is very sensitive when it comes to stress. Various problems related to stress are myofascial pain and dysfunction syndrome(MPDS) oral lichen planus and bruxism.

In the given article I have discussed about anxiety and stress related oral manifestation and their respective management protocol. The importance of good oral maintenance and ideas related to stress tackling procedure and their overall effect on oral diseases.

Existence is intricately tied to the maintenance of homeostasis, a delicate balance constantly challenged by internal and external stressors. Favourable conditions contribute to the species growth, development, and survival. However, encountering threatening situations beyond an individual's normal control can activate the stress response, potentially leading to dysphoria and eventual emotional or somatic diseases.

Keywords: Conversion Hysteria, Dysmorphophobia, Idiopathic Dysgeusia, Mucosal Ulceration

Introduction

Health is considered as a state of well-being, which goes beyond the absence of illness or disability. Mental health problems are widespread around the world, affecting people from various backgrounds and countries. Improving the health and social integration of people with mental health issues is a major goal in promoting national well-being. Greek terms psyche and soma are the source of the term psychosomatic. Psyche, which meant "soul or mind" in ancient, has come to mean "behaviour" as well¹.

For centuries it is recognized that emotions and psychological

terms contribute at various body ailments. Although the conventional view separates the mind (psyche) from the body (soma), understanding the interaction between them is crucial. Sigmund Freud elucidated this connection through the concept of "conversion hysteria," wherein unresolved emotions manifest as somatic symptoms or changes in expressive behaviour. The integration of mind and body is evident, with most diseases being psychosomatic, encompassing both mental and physical components. Each physical ailment carries a psychological aspect, and individuals' reactions and coping mechanisms vary widely. The mouth, as an organ expressing innate cravings, holds significant psychological tendency. There are disease

affecting oral areas directly or indirectly reflect emotional expressions and conflicts. In the realm of medicine, it has long been acknowledged, with mental and emotional factors acting as triggering influencing the progression and initiation of Oro-mucosal diseases².

Two theories are presented to narrate the relation between 'soma' and 'psyche'. According to the Specific theory, a particular stimulus, conflict, or stressor is what causes an appointed sickness or ailment to develop. This is explained by the body's increased reaction, which lasts after the triggering stimulus has stopped and finally results in the onset of an illness. Conversely, the Nonspecific theory postulates that a generalized stress generates potentially random predispositions for a range of diseases. This theory states that there are four different kinds of reactions that stress can cause: neurotic, psychotic, psychosomatic, and healthy normal³.

3.1 Stress responses to body

Existence is intricately tied to the maintenance of homeostasis, a delicate balance constantly challenged by internal and external stressors. Favourable conditions contribute to the species' growth, development, and survival. However, encountering threatening situations beyond an individual's normal control can activate the stress response, potentially leading to dysphoria and eventual emotional or somatic diseases⁴.

The Hypothalamic-pituitary-adrenal (HPA) axis is the mechanism by which it activates the Autonomic nervous system (ANS). Adrenocorticotrophic hormone (ACTH), enkephalins, and endorphins are released as a result of this axis' secretion of corticotropin-releasing factor (CRF) and arginine-vasopressin (AVP). As a result, a positive, bidirectional feedback loop drives the stress-response mechanism.

Both arginine-vasopressin (AVP) and corticotropin-releasing factor (CRF) are produced rhythmically in non-stressful environments, with two to three secretory episodes occurring per hour on average. When at rest, they reach their highest point at the early timeslot and then slowly decline across the period of the day. However, these circadian rhythms are disturbed under stressful environments. Acute stress causes the pulsations of arginine-vasopressin (AVP) and corticotropin-releasing factor (CRF) to become more intense, which raises cortisol and ACTH levels. Stress also causes the release of a number of other substances, including cytokines, lipid mediators linked to inflammation, and angiotensin II. These elements work together to enhance the activity of Hypothalamic-pituitary-adrenal (HPA) axis³.

4. Classification of Psychosomatic Disorder

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4.1 WHO's 1993 International Classification of Diseases (ICD-10)¹

4.1.1. Categorized based the presence absence of cells destruction: First in line is the category "Psychological changes from mental factors," which includes a variety of mental origin psychological dysfunctions as well as physical manifestations. These disorders are usually handled by the autonomic nervous system (ANS) and do not include tissue damage. Examples include hyperventilation and psychogenic cough in the respiratory system, cardiac neurosis in the cardiovascular system, and itching in the skin. The second category includes "Psychic factors" or "mental disturbances" which may have been an important contributing factor for the development of various body related disorders, typically which involves body damage. Psychosomatic diseases including urticaria, mucous colitis, ulcerative colitis, dermatitis, eczema, gastric ulcer, and asthma are among the examples. Shklar McCarthy (1980) described categories such as oral psychosomatic illnesses, which include lichen planus, stomatitis, glossitis, in relation to disorders of psychosomatic associated buccal and oral mucosa. They also discovered conditions including mucous pemphigoid erythema multiforme, and periodontal chronic diseases where psychological elements may be involved in their aetiology. They also emphasized oral illnesses such as necrotizing gingivitis and recurrent herpes labialis, for which emotional stress acts as a predisposing factor. Finally, they talked about oral problems brought on by neurotic behaviours, such as bruxism-caused dental/periodontitis, leukoplakia, and self-mutilation by biting of the oral mucosa. According to Bailoor and Nagesh (2001), psychosomatic diseases in the context of dentistry fall under the following categories:

4.1.1.1 Disorders pertaining to pain:

- a. Myofascial pain dysfunction syndrome
- b. Unusual facial discomfort

4.1.1.2 Conditions involving changing oral flora

- Lichen planus
- Recurring pharyngitis
- The psoriasis
- Multiform erythema
- Fear of cancer
- Acute gingivitis with necrotizing ulcers
- Bulimia nervosa
- Bruxism

The following categories make up Shamim's (2014) updated basic working taxonomy for psychosomatic diseases related to dentistry practice:

4.1.1.3 Myofascial pain dysfunction syndrome and atypical facial pain are two examples of pain-related illnesses:

- a. Non-standard odontogenic pain
- b. Phantom discomfort

4.1.1.4 Conditions involving altered TASTE sensation:

- a. Burning feeling in the mouth
- b. Xerostomia
- c. Dysgeusia
- d. Glossodynia
- e. Glossopyrosis

4.1.1.5 Conditions brought on by neurotic behaviours:

- a. Bruxism-related periodontal and dental disorders
- b. Oral mucosa biting (self-mutilation)

4.1.1.6 Immune System Diseases:

- a. Lichen planus oral
- b. Aphthous stomatitis recurring
- c. Psoriasis
- d. Pemphigoid mucous membrane
- e. Multiform erythema

4.1.1.7 Disorder Resulting from a Change in How Dentofacial Structure and Function are Perceived:

- a. Dysmorphic body image disorder

4.1.1.8 Other Disorders:

- a. Recurrent labialis herpes
- b. Gingivostomatitis with necrotizing ulceration
- c. Long-term periodontal conditions
- d. Fear of cancer
- e. Hallucinogenic delusions

4.2 Common Oral Health Conditions Where Psychological Factors Play a Major Role

Muscle contractions causing a headache-like sensation in the face are the hallmark of Myofascial Dysfunction Syndrome (MPDS). Psychological symptoms such as anger, irritation, anxiety, despair, and hypochondriasis are frequently reported by people with Myofascial Dysfunction Syndrome (MPDS). Maladaptive behaviours include verbalizing pain, getting poor sleep, eating poorly, exercising seldom, clenching, and bruxism are frequently brought on by prolonged pain. Numerous investigations on these variables have shown that anxiety and despair have a major influence in maintaining Myofascial Dysfunction Syndrome (MPDS) symptoms⁵.

Atypical Facial Pain involves poorly localized pain in a specific area of the face, showing no abnormalities in investigations. The exact etiology is unknown, but psychological factors are evident. A study by Bailoor and Nagesh found a strong association between atypical facial pain, depression, and life stressors in a sample of 21 females and 7 males. Females consistently exhibited more intense symptoms, with positive responses shown mainly to medication that are antidepressants along with counselling courses⁴.

Toothache of uncertain origin, maybe due to vascular/neurovascular reasons or deafferentation neuralgia, is referred to Atypical Odontalgia (AO). Although the precise cause is yet unknown, research points to a psychogenic component. 42% of AO patients in one research reported having depression, which begs the question of whether depression and pain are causally related. Another investigation confirmed the hypothesis that depression, somatization, and conversion disorders play important roles in the high psychogenic components observed in some AO patients⁵.

When there are no obvious mucosal abnormalities or organic disorders, the term is defined as persistent burning discomfort in the mouth. It is thought to be a complex disorder with neurogenic, local, systemic, and psychogenic components. Anxiety, sadness, obsessive-compulsive disorders, psychosocial

stress, and cancerphobia are psychogenic variables associated with body mass syndrome. Chronic ache chronic vegetation and chronic somatoforms phenomena are the three categories into which the psychological elements of Burning Mouth Syndrome (BMS) can be divided. The subjective feeling of dry mouth associated with idiopathic xerostomia is caused by hypofunction of the salivary glands. Psychotropic medicines, such as antidepressants, anticonvulsants, antipsychotics, anticholinergics, and alpha-agonists, are frequently used in conjunction with other prescription medications and are known to be major causes of xerostomia. Systemic illnesses like dryness of mouth, psychiatric disorders, along with functional alterations are other elements that cause harm. Notably, depression symptoms are common in people with idiopathic xerostomia⁶. Idiopathic Dysgeusia involves persistent abnormal taste, which can result from dry mouth or burning mouth syndrome (BMS) in mentally disabled patients. Cancer therapy, specifically radiotherapy and chemotherapy, can also lead to taste alterations, negatively impacting the way of living. When someone bites their tongue or oral mucosa, they are self-mutilating and may suffer serious injuries. Chronic biting of the tongue, cheek, or lip is usually the cause of this behaviour. Neurotic people can also cause harm to their mental stature with the help of foreign items like toothpicks, sharp pencils, or fingernails. Since local abrasion with a sharp tool may result in many gingival ulcers or linear palatal or faucial ulcers, identifying separate lesions can be difficult. Massaging the mucosa of the alveoli Bruxism, or excessive grinding of the teeth during parafunctional activity, can lead to periodontal disease, temporomandibular dysfunction, abfractions, and other dental and periodontal disorders. Tension and worry they are taken as a significant alert alarm for bruxism, even if the exact cause of the condition is unknown. Behavioural disorders and possibly emotional problems have also been recognized as potential risk factors for bruxism in children a finger can leave an elongated erythematous patch, all of which are observable in accessible areas of the oral mucosa⁷. The look of factitious ulceration, often referred to as stomatitis artifacts, might vary based on the process by which the lesions form. An individual who is youthful, nervous, and prone to anxiety may exhibit cheek chewing, which is a common and mostly benign expression that causes large regions of peeling, macerated, and hyperkeratinized skin. In the lower labial vermilion border, lip biting can cause indurations, patches such as mucocele and hyperkeratinization. These lesions appear as a spherical, blue, fluctuating swelling that changes in size over time. Lip chewing can cause varicosities in elderly individuals who are disturbed or anxious, which gives the vermilion border a strangely cyanotic look⁸.

Self Inflicted Classification of Injuries⁸

According to Kernmohan and Stewart

Type A: Damage layered on top of pre-existing lesions

Type B: Damage resulting from an established practice

Type C: Damage with an unclear or complicated cause

4.2.1 Oral Lichen Planus

Lichen planus, first reported by Wilson, is a long-term condition that can cause malignant degeneration and affect the skin, scalp, nails, and mucosa. It affects 0.9% to 2.2% of people, and the erosive variety is frequently linked to psychological issues. Although the exact cause for Lichen planus (LP) is unknown, tension, worry, hormones like cortisol marks are

among the psychological variables that have been linked to the disease's pathophysiology⁹.

4.2.2 Aphthous Stomatitis (Recurrent)

The quality of life is greatly impacted by oral problems, which also have an effect on speech, diet, appearance, self-esteem, and social contact. It has a detrimental effect on the way of living and is defined by numerous, recurring episodes of burning sensation. Instead of being a direct cause, psychological stress may function as a trigger or moderating element in the appearance of aphthous stomatitis (recurrent). Prior research has mentioned influence of tension anxiousness and deconstructed thoughts on incidence and severity of disease. An aspect of aphthous stomatitis (recurrent) pathophysiology, psychological stress triggers immunoregulatory activity that increases leukocytes in inflammatory locations. Anxiety-related oral behaviours, like cheek bite and lip trap, can lead to harm and predispose people to aphthous stomatitis (recurrent)^{9,10}.

4.2.3 Pemphigus

The interconnectedness of psyche, immunity, and skin creates a pathogenic link where intense emotional stress can potentially trigger autoimmune skin disorders. Instances of pemphigus induced by emotional stress, while not extremely common, suggest in which the idea of psychosomatic stress initiating the disease can be decline.

4.2.4 Herpes Labialis Infection (Recurrent)

Twenty to forty percent of people have recurrent Herpes labialis infections, which show up as repeated outbreaks of herpetic sores. Recurrences of the herpes simplex virus (HSV) can be caused by a number of things, such as physical trauma, menstruation, dietary variables, fever, or UV radiation exposure. Additionally, clinical data suggest a possible link between herpes simplex virus lesions and psychological variables like stress or depressive states. Stressful life experiences are positively correlated with the recurrence at herpes simplex virus-1 and herpes simplex virus -2. Previous research shows unpleasant emotions, such as sadness, worry, or discontent, occur before herpes simplex virus recurrences. Schmidt discovered that the connection between stress and the frequency of herpes simplex virus was considerably mitigated by the length of the disease and herpes-specific social support¹⁰.

4.2.5 Dysmorphophobia

It is the belief that one has a cosmetic defect even when one's look is normal. The imagined problem may be anything from a slight unattractiveness to a conviction about ugliness, which would prompt the person to seek therapy to correct the presumed defect. Remarkably, a large fraction of patients seeking cosmetic surgery concentrate on face features such as the lips, nose, ears, eyes, chin, and teeth. These people frequently voice odd worries about their grin or features. It's crucial to understand that this illness is better described as "morpho dysphoria" since it is more accurately described as an obsession or illusion than as a real fear. In contrast to secondary dysmorphophobia, principal dysmorphophobia is defined as a neurological or psychological feature that is identified separately from other mental diseases^{11,12}.

5. Management of Psychosomatic Disorders Involves Exploring Diverse Treatment Approaches

Psychosocial Interventions:

- a. Self-observation
- b. Cognitive-behavioural treatment
- c. Relaxation training
- d. Mind-reading
- e. Biofeedback

Pharmaceutical Methods:

- a. Pharmaceuticals, including antidepressants
- b. Antidepressants
- c. Drugs that are antipsychotic

By addressing the interaction between psychological and physical elements, these modalities offer a thorough method for treating psychosomatic diseases^{13,14}.

6. Conclusion

In conclusion, it can be asserted that numerous oral diseases exhibit a psychological element in their origins or are influenced by psychosocial factors. Additionally, various psychiatric disorders exert an impact on the oral tissue's health. Given the escalating stress levels in contemporary life, driven by intense competition across various domains, dental practitioners are increasingly likely to encounter patients grappling with such disorders. Consequently, it is imperative for practitioners to be well-versed in recognizing these manifestations and, when necessary, collaborate with psychiatrists for effective management.

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