

## MIND–BODY INTERACTIONS IN DENTISTRY: PSYCHOSOMATIC DISORDERS AND ORAL HEALTH

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### ABSTRACT

The oral cavity functions as a sensitive diagnostic barometer for an individual's psychoneuroimmunological state. Beyond its primary roles in mastication and phonation, the oral environment is highly responsive to the hypothalamic-pituitary-adrenal (HPA) axis. Chronic psychological distress triggers a cascade of neurochemical changes that can significantly alter oral homeostasis. This review illuminates the often - overlooked connection between mental well-being and oral health and emphasizes the crucial role of dental practitioners and psychiatrists in recognizing this relationship.

**KEYWORDS:** Psychosomatic disorders; oral health; dentist; psychiatrist.

## INTERACCIONES MENTE-CUERPO EN ODONTOLOGÍA: TRASTORNOS PSICOSOMÁTICOS Y SALUD BUCODENTAL

### RESUMEN

La cavidad oral funciona como un sensible barómetro diagnóstico del estado psiconeuroinmunológico de un individuo. Más allá de sus funciones primarias en la masticación y la fonación, el entorno oral es altamente sensible al eje hipotálamo-hipófisis-adrenal (HHA). El estrés psicológico crónico desencadena una cascada de cambios neuroquímicos que pueden alterar de manera significativa la homeostasis oral.

Esta revisión pone de relieve la conexión, a menudo pasada por alto, entre el bienestar mental y la salud bucal, y enfatiza el papel crucial de los profesionales de la odontología y la psiquiatría en el reconocimiento de esta relación.

**PALABRAS CLAVE:** Trastornos psicosomáticos; salud bucal; odontólogo, psiquiatra.

### INTRODUCTION

“What mental health needs is more  
sunlight, more candor and more  
unashamed conversations.” Globally,  
persons with mental illnesses endure

greatly poorer physical health that  
reveals a strong link between medical and  
social determinants of health. It is clear that  
this group faces the highest risk of many  
chronic physical ailments and that they

have suffered considerably from oral diseases, among others. Comorbidity leads to a host of problems. One of these is the difficulty in managing mental illnesses; another is an extremely shortened lifespan of patients. (1,2,3)

The reality described by the World Health Organization in 2013 is the alarming risk of early death that people with severe mental illness (SMI) experience when they have a possible increase of up to 60% in mortality risks. The degree of loss between 10 to 20 years of life in developed countries or even 30 years in low-income countries for SMI patients. Sadly, many of these deaths are often seen in mortality statistics just because of the mental health condition itself; instead, the mortality rates can often be attributed to preventable physical

illnesses where poor oral health is often overlooked in many patients with SMI. (2,3)

The increased prevalence and complexity of oral diseases in individuals with mental illnesses are not spontaneous but the consequence of a complex interrelationship of factors. First, the very psychotropic medications used to manage these diseases have been found to directly produce negative impacts on oral health. (1-4) A common adverse effect of many psychotropic medications is xerostomia, or dry mouth. Saliva plays a major role in maintaining a healthy oral environment. Saliva neutralises acids, removes bacteria and food particles from teeth and remineralises enamel. Dental issues may arise when the salivary gland cells are unable to produce enough saliva. (2,3)

Second, a person's manifestation of mental illness can also have a significant impact on their oral hygiene practices. When someone is cognitively impaired, it can also be difficult to keep up with their oral hygiene guidelines. Maintaining a diet high cariogenic substances can be difficult, Financial difficulties and social stigma may prevent a patient from routinely receiving dental care. (1-4)

Thirdly, there is growing evidence that physical and mental well-being are related. Most people with mental health issues may have stress related disorders. The body is impacted by this. Periodontal issues may occur in certain situations. For instance, the way the body and brain interact illustrates the relationship between them. (1,2)

The challenges in the current healthcare system have resulted in the situation are highlighted by the fact that large scale, practical solutions for handling concurrent dental care issues have not yet been developed. The focus of future studies needs to be geared towards the risk factors underlying this disparity in order to address this imperative problem accordingly. These comprise examining the effects of various types of psychotropic drugs on one's oral health, designing strategies related to personal hygiene practices suited to meet the requirements of mentally ill patients, examining the effects of dietary practices, lifestyle factors, and finally designing healthcare frameworks to efficiently include treatments related to oral health in facilities designated to address mental health issues.

<sup>(1-4)</sup> This important issue is being addressed

in this review not only to improve the standards of oral health care but to eliminate deaths that could have been prevented because of health issues related to mental health conditions, ultimately prolonging the lives of this susceptible section of society significantly. (1,2)

### **What Are Psychologic Disorders?**

The other name of the psychologic disorders is mental illness or mental disorders. The American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders (APA DSM-5) defines a mental disorder as “a syndrome characterized by clinically significant disturbance in an individual’s cognition, emotion regulation, or behaviour that reflects a dysfunction in the psychological,

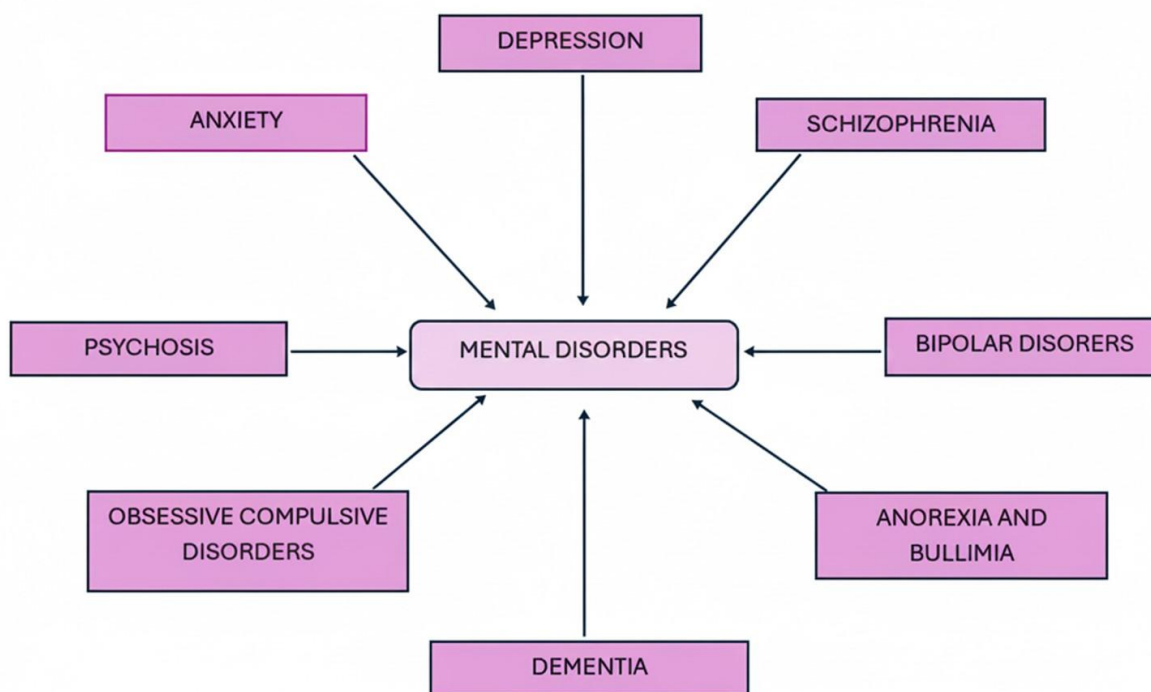
biological, or developmental processes underlying mental functioning”. (5) It is known that many diseases are affected due to the psychologic factors. The reasons are heart rate, digestion, immune system, as well as the healing mechanism. This gives hint about the oral area where the psychologic stress/distress manifests itself in the body. (6,7)

The mental health problems can present in terms of symptoms in the oral cavity in the form of: Facial pain or oral dysesthesia and extensive erosions of the teeth .In about 30% of patients, the psychopathologic symptoms make it difficult for the individual to interact in daily life.<sup>(4)</sup>In this manuscript, different factors that influence the oral cavity, some psychological disorders that are known, and the part of the dentist and



the psychiatrist in treating psychosomatic

disorders shall be discussed.(6,7,8) [Fig 1]



**Figure 1:** Conceptual Framework of Common Mental Health Disorders. This diagram illustrates the relationship between the central category of Mental Disorders and its various specific manifestations.

### Psychosomatic Disorders

‘Psyche’ means ‘mind’ and ‘soma’ means ‘body’. Thus, psychosomatic means related to mind and body. (5)

“Psychosomatic disorders” refer to situations whereby people exhibit physical

symptoms, which could be distressing, along with significant disruption in daily life, in which case psychological factors are thought to have contributed to such symptoms. (DSM-5: APA) (5)

“Psychosomatic disorders constitute a group of clinical disorders in which there

are prominent manifestations of physical symptoms or exacerbation of the existing organic diseases in which the mental factor is recognized as an important contributing cause.” The complex interplay of communications from the central nervous system, endocrine system, and immune system influences physiological phenomena. (8,9)

### **Stress and Mental Health**

Stress essentially symbolizes the complex nature of the body's reaction to events that disturb the equilibrium of the body's physiological and psychological systems. Such events are known as stressors and pose a continuous threat to the natural ability of the body to maintain the state of homeostasis in it; that is, overall stability in

the body is very important for living organisms. (8,9)

The autonomic nervous system, especially through the release of catecholamines like adrenaline and noradrenaline, is a major aspect in the acute stress response. This, in turn, activates neurotransmitter systems of the central nervous system, notably increasing serotonin turnover and affecting dopaminergic pathways. Moreover, there is the release of corticotrophin-releasing factor from the hypothalamus, as well as glutamate and gamma-aminobutyric acid, setting off a complex neurochemical cascade. (6)

Non-stressful conditions present the pattern of CRH and AVP release in a regular circadian rhythm. It includes pulsatile secretion, which is estimated at about two

to three events within an hour. This level usually peaks during the early morning hours during rest and then gradually declines throughout the day. On the other hand, the diurnal variations in this carefully orchestrated process are disrupted after the imposition of stress. (8,9,10)

Acute stress results in a sudden and transient increase in the secretion of adrenocorticotrophic hormone and cortisol. This response mainly stems from the frequent and large pulsation of CRH and AVP in the hypothalamus. Nevertheless, variations in the level of gonadal steroids can permanently alter the activity of the hypothalamic-pituitary-adrenal (HPA) axis, the body's central stress response mechanism, and trigger lifelong variations in the secretion of glucocorticoids or cortisol. Disrupted levels of cortisol can

have disastrous effects on neurons in the body and might form the background for neurological and psychological pathologies. Furthermore, there exists overwhelming evidence indicating trans placentally transmitted stress in pregnant women can form the background for offspring's predisposition towards an excessive cortisol response in life, owing to the long-lasting effects of stress. (9,10)

### **Psychological Factors and Oral Health**

The correlation between psychosomatic disorders and oral health is complex because of the close influence that a state of mind has on physiological processes and behaviours. In the centre of the psychosomatic condition is psychological distress, leading to the neuroendocrine



events that include the HPA axis and autonomic nervous system. (11) The changes in hormone and neurotransmitter levels that result have the potential to affect the immune system and inflammatory processes in the oral cavity, thereby predisposing that individual to or exacerbating conditions like oral lichen planus and recurrent aphthous stomatitis. (10,11)

In addition to the previously listed elements, psychological stress can manifest as altered behaviour, which could have negative impact on oral health. Stress and tension can lead to unintentional para functional habits like bruxism or clenching of jaw; in these cases, the occlusal forces are so strong that they not only wear down enamel but also cause painful temporomandibular joint disorders. (10, 11)

Furthermore, oral health may be indirectly impacted by the wider physical consequences of stress brought on by psychosomatic disorders. Stress-related gastrointestinal problems and consequent eating habits may cause vomiting, thereby exposing the dental enamel to highly acidic gastric juices. (10,11,12) In parallel, patients suffering from the mental aspect of psychosomatic disorders often manifest low motivation for personal hygiene practices, including poor oral hygiene practices, thereby enhancing the potential for the development of dental caries and periodontitis. The interplay of various factors makes it imperative for there to be a comprehensive approach in the perception and management of oral health in patients with psychosomatic disorders due to the strong bidirectional relationship existing in

these afflictions between the mind and the oral health of patients. (10,11)

### **Psychosomatic Disorders affecting the Oral Cavity**

**Burning Mouth Syndrome (BMS):** The trigeminal nerve is regarded as the main sensory nerve of the face and oral cavity and is important for carrying sensations such as touch, pressure, temperature, and pain. The role of particular nerve fibres looks important here in BMS. (1,2,10,11)

Large myelinated A $\beta$  afferents normally relate to light touch and pressure. Damage or dysfunction in such fibres might result in abnormal sensory processing and could thus contribute to the disturbed taste sensation-an important complaint of many

BMS patients. This damage is further conjectured to disturb normal inhibitory control, usually by these fibres on pain pathways, leading indirectly to the burning sensation. (11,12)

An interesting observation is the decrease in the A $\delta$  fibre signal, which signals sharp and localized pain, as well as sensations of hot and cold. Although one may think that the decrease in A $\delta$  fibre signal would not make sense in a burning pain condition, it may represent an imbalance in sensory input that results in increased or misinterpreted signals from C fibre signalling, which could lead to increased intensity of pain from those nerve fibres.

**Xerostomia:** A complicated condition that has a major impact on oral and general health is hyposalivation, or decreased saliva

production, which results in xerostomia, a persistent dry mouth sensation. Psychological factors, especially stress and depression, play an important but often disregarded role in its development, even though physical factors like aging, medication, or systemic diseases are frequently blamed. By activating anticholinergic pathways, depressive disorders like bipolar disorders, dysrhythmia, major depressive disorders can reduce the production of saliva in the mouth. This reduction exacerbates the symptoms of dry mouth making daily activities like speaking eating and swallowing more challenging. (1, 2, 11, 12, 13)

Stress worsens the matter because it raises salivary cortisol, a hormone produced during stressful conditions. Chronic stress

maintains this level of cortisol continuously, thereby affecting the salivary glands making them dormant and incapable of producing adequate saliva, Also, apart from xerostomia being more physically uncomfortable, the dual action of stress and depression places affected individuals under extra emotional and social stress, which can reduce their quality of life. (10, 11, 12)

The connection that clearly relates the psychological wellness of individuals with cases of xerostomia only underscores the importance of having a comprehensive management program. The production of saliva, therefore could be improved, reducing even the occurrence of the illness, through the management of psychological disorders through counselling and anti-psychological illness medication, coupled

with stress management through various techniques including mindfulness and stress relief. Additionally, many illnesses relating to xerostomia are also addressable through proper models of dental care. The interconnection of psychological wellness and physical conditions is evident through this relationship. (1,2,11)

#### **Recurrent Aphthous Stomatitis (RAS):**

Recurrent Aphthous Stomatitis (RAS) may be characterised as the most common ulcerative disease of the oral cavity, with an intentional prevalence of approximately 20% of individuals within the normal population. The defining feature of RAS is the experience of pain resulting from ulcers, where the ulcers have a recurring cycle. The ulcers may become a major limitation to the

patients, where normal oral functions are barely enough to participate in daily activities, e.g. eating, speaking. The exact etiology of RAS remains unknown; however, stress was recognised to play a major role in the occurrence of RAS, RAS lesions have actually been recognised to occur following stressful activities, e.g. school examination stress, unpleasant dental, major life changes etc. (1,2,3)

Also, psychological stress, by virtue of its role in the immune system, partly contributes to the pathophysiology of RAS. An elevated leukocyte count is noted during inflammatory sites, which is an indicator of an intensification of immunoregulatory activity during stress. Development of aphthous ulcers is partly attributable to an intensified immunoregulatory response, which facilitates the progression of

inflammation. Also, changes in cytokine levels caused by stress may exacerbate deterioration of mucosa. (1,2)

Besides its physiological impact, RAS may also lead to psychological or emotional distress, especially when ulcers are very severe or keep returning. Traditional treatments for RAS might be complemented by methods aimed at reducing stress such as exercises or cognitive behavioural therapy, to further improve results. Physical symptoms are ameliorated by topical corticosteroids, antimicrobial rinses and painkillers; stress management prevents recurrence. An appreciation of the multifactorial nature of RAS, including psychological components, underscores the importance of a holistic approach to the treatment of this common but disruptive condition. (11, 12)

**Oral Lichen Planus (OLP):** Generally, the most affected areas of the human body by the chronic inflammatory state known as oral lichen planus (OLP) in the oral mucosa. Oral lichen planus most commonly occurs on the gums, tongue, or inside the cheek. Its manifest itself as white lace like or reticular patches or lines. Stress, anxieties or other related psychological factors play major role in the development or exacerbation of OLP. Increased inflammatory activity; one of the most observable factors occur due to alteration or changes that take place within the immune system brought on by stress. (1,2,3)

Research findings indicated that psychic stress can be considered as an initiating factor in the transformation of moderate reticular type of OLP into severe erosive



types. Chronic injury of the mucosa due to stress and hindrance in the healing process can make the disease challenging to manage. (10-12)

The relationship between emotional health and OLP is not restricted to pain and discomfort, as OLP may also influence the mental health of the patients. Managing both mental and physical health is necessary for proper treatment. Stress management tools such as relaxation therapy, mindfulness, and therapy may be used along with other therapies such as corticosteroid therapy and immunomodulator therapy. (1,2,3,10)

Such an approach not only aims at bettering symptoms but also works to improve the lives of patients living with OLP. The strong link between psychological stress and

inflammatory diseases such as OLP makes it imperative to adopt such an approach towards providing treatment to patients. (10,11,12)

### **Morsicatio Labiorum and Morsicatio**

**Buccarum:** "Morsicatio" is a term designating the habitual act of mechanical trauma that the patient inflicts on the oral tissues with repetitive biting, sucking, or chewing. According to the site involved, it is termed morsicatio labiorum when it affects the lips, morsicatio buccarum when the involvement is the buccal mucosa, and morsicatio linguarum when it affects the tongue. Clinical presentation shows these lesions as white irregular thickened or shredded patches as the result of chronic

irritation due to the continuous nature of the trauma and delayed healing. (10,11)

Psychological stress and emotional instability are the main etiologic factors, with the majority being linked to unconscious coping mechanisms during periods of psychological distress. Besides that, characteristics of emotions may lead to the problem such as aggression, loneliness, identity conflicts, or jealousy that might make compulsive behaviours. Continuous psychological tension leads to the repetition of such behaviour, thus causing the beginning and the continuation of these lesions. (4,5,6)

Recent studies have shown a strong link between depression and morsicatio buccarum. The neurobehavioral mechanisms associated with depression

may cause an individual to develop this habit of biting, thus forming a vicious cycle of continuous deterioration of the tissues. Not only is the condition evident in its presentation in the mouth, but it is also an aspect of strong psychosomatic relationships between the emotions and the body. (9-12)

Effective management of the condition needs an inter-disciplinary approach. While the dental interventions of protective barriers and topical agents act as an effective means of physically alleviating the symptoms of the condition, it is necessary to work on the psychological aspects as well. Cognitive-behavioural therapies, management of stress, and psychological counselling have proven to be highly effective in lowering the possibilities of the condition or its intensity. Such approaches

in psychology underscore the complex relationship between mental health and dental conditions. (9-12)

**Bruxism:** Bruxism refers to the involuntary clenching or grinding of teeth, occurring during either sleep or wakefulness.

Symptoms in humans range from mild morning parafunction with little or no symptoms to serious damage to the masticatory system. Although being a multifactor disease, psychological factors contribute to the development and maintenance of bruxism. Various studies have further confirmed stress, anxiety, hyperactivity, behavioural disturbances, and maladjustment to change as triggering factors. Other pathogenic elements include emotional syndromes and learning disabilities contributing to the development of an increased psychological tension that is

manifested somatically by occlusal parafunctions. (9,10) TMDs, a collection of disorders that involves TMJ, muscles, and the adjacent structures, have been reported to be caused majorly by mental stress and depression.

In due time, habitual grinding and clenching of the teeth lay more stress on the TMJ and give rise to pain, muscles spasm, and dysfunction of the joint. The induced stress itself, on the other hand, increases these parafunctional activities through central nervous system hyperactivation, so a vicious cycle is formed that leads to further destruction of dental and oral tissues. (10-12)

Treatment protocol for bruxism needs to be versatile. Dental care methods such as occlusal splints assist in guarding against

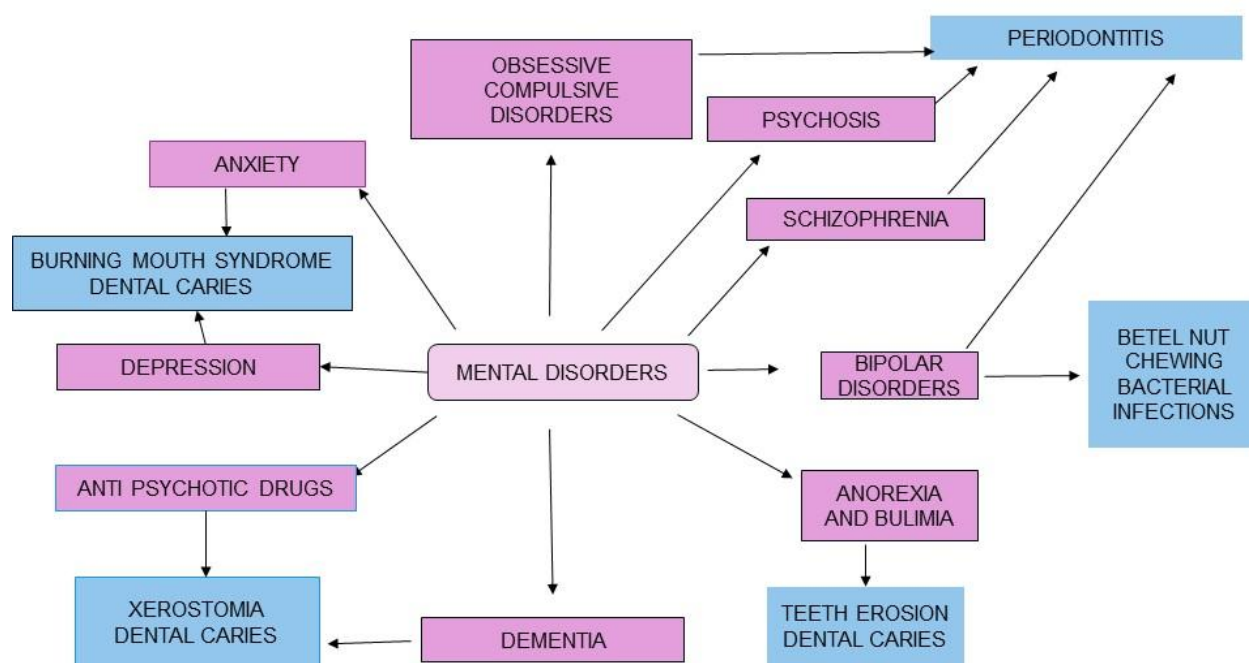
tooth damage and reducing TMJ stress. Nevertheless, it is critical to acknowledge psychological factors as contributing causes to help stabilize it. Stress management strategies, cognitive-behavioural therapies, and life management requirements like better sleep and stress-relieving activities may assist in this process. (11,12,13)

**Phantom Tooth Pain (PTP):** Phantom Tooth Pain (PTP), also known as atypical odontalgia, is a condition entailing a chronic condition of pain attributed to nerve dysfunction and resulting from oral dental pathology and/or surgical intervention sites where substantial pain is experienced in these areas despite there being no visible signs of any abnormalities or oral/dental pathology. PTP patients are also commonly

misdiagnosed with patients suffering from atypical facial pain because these people express similar complaints and manifestations. (13,14)

Pathophysiology for PTP is believed to occur because of abnormalities in the central mechanisms for pain processing. Chronic exposure to pain stimuli along with chronic stress is believed to cause abnormal neuroplastic changes in the central nervous system, especially in pathways involving pain modulation, thereby causing increased sensitivity towards pain. [Fig 2] The role of psychological stress is of paramount importance while speaking of this aspect. This gives rise to the emotional pain caused by pain stimuli. hence increasing the pain itself. this gives rise to the cycle of pain and stress. (11,12)

**Figure 2:** Impact of Mental Health Disorders and Related Factors on Oral health



This increased activity of hypothalamic pituitary adrenal axis due to stress and the resultant increase in stress hormone levels, such as cortisol, would thereby increase the pain. These studies thereby point towards the importance of a multidisciplinary

approach for the management of PTP. (1,2,3)

The treatment methods in the management of such conditions are the following: the use of pharmacological drugs such as tricyclic antidepressants, serotonin and



norepinephrine reuptake inhibitors, or anticonvulsants in the management of the patient's neuropathic pain. Moreover, psychological approaches of cognitive behavioural therapy and stress management would be a huge opportunity in managing the patients' psychosomatic aspect within the context of PTP. (3,4,5)

### **Myofascial Pain Dysfunction Syndrome**

**(MPDS):** Myofascial Pain Dysfunction Syndrome has a very intimate relationship between the psychological factors and the oral conditions. MPDS is a chronic condition that involves the masticatory muscles and TMJ and can manifest itself in signs such as facial pain, tenderness and inability to move jaw. The most important of the psychological factors are stress, anxiety,

and depression associated with the development and progression of MPDS. These factors can result in muscle tension and parafunction such as bruxism, which further irritates the TMJ and masticatory muscles. (1,2,9,10,11)

The relationship between psychological mechanism and MPDS is based on the neuroendocrine system. Stress results in the activation of hypothalamic-pituitary adrenal axis and an increase in cortisol levels, the utilisation of this stress response can result in increased pain perception and muscle dysfunction. Psychological distress has also been suggested to result in the alteration of central pathways associated with pain perception, resulting in increased pain sensitivity. (9,10)

MPDS is also associated with several conditions of the mouth, including bruxism. Burning mouth syndrome, and conditions of the mucous membranes of the mouth that include recurrent aphthous stomatitis [RAS] and oral lichen planus [OLP]. These conditions are associated with psychological factors such as stress and mood instability that may trigger the inflammation and ulceration that occurs in the mouth. (10,11)

In managing MPDS an interdisciplinary approach is required. In addition to managing the psychological problems in MPDS through cognitive and behavioural techniques, stress management and relaxation techniques, oral therapies such as occlusal splints and physical therapy techniques can also help in managing MPDS. The importance of managing oral problems, along with the psychological

problems in MPDS, is thus emphasised. (1,2,3,4)

### **Relation between Physical, Mental and Dental Health**

The current state of modern healthcare continues to perpetuate a chasm that results in the separation of psychiatry from general medicine. This separation generates problems when dealing with a host of disorders that both mentally and physically connect. This has resulted in patients suffering from these disorders presently being overlooked because their specific requirements cannot be placed squarely within treatment guidelines established through generalized information. This separation is seen in disorders where stress-related disorders result in somatic

symptoms, including those dealing with dental problems. (1-5)

Stress, as measured using instruments such as the Perceived Stress Scale (PSS), provides valuable information regarding personal emotional experiences. (1,2,3) However, due to stress having a single dimension, there is certainly room for improvement and has therefore driven researches to discover different methods to determine stress levels using different biomarkers such as heat shock proteins (HSPs), oxidative stress levels, and acute phase proteins (APPs). The methods above give information about stress at a more objective and tangible level and indicate stress as a bridge between mental and physical health issues. (1,2,10,11)

Where the relationship between the two disciplines is particularly evident is in the field of dental care. A meta-analysis conducted by Kisley, et al. (15) highlights the relationship between serious mental health and dental conditions, such as dental caries or complete tooth loss. These conditions arise from a variety of sources, including poor dental habits, the effects of medication on saliva levels in the mouth, and psychosocial factors that contribute to poor patients' reluctance to seek care. Dentists have the unique opportunity to spot signs of poor mental health in patients who would not, under ordinary circumstances, seek out a mental health practitioner. (4-6)

The challenges that arise from the need to solve these issues extend beyond the healthcare providers to include the families

of patients. The families play a crucial; role in motivating the patients to maintain good oral and genera; healthcare. The unconcerned behaviour and fear of treatment of patients with mental disorders create a significant shift in the role of the families. They can serve as a link between the healthcare providers and patients. (4,5,6)

However, the families themselves also experience a lot of stress in taking care of their loved ones who are suffering from illnesses. This, in turn, could weaken their capacity to offer long term support which could be a vicious cycle that could make the lives of both patients and families unbearable. Family dynamics, on the other hand, must also be taken into consideration by the healthcare providers in their holistic plan of care. Counselling and training can

help the families and caregivers overcome these challenges and make sure that their support results in an improvement in the health condition. (1,2,10,11,12,13)

It is necessary that a collaborative approach be adopted for the treatment of such highly interlinked issues. Dentists and mental health practitioners should work together and adopt a common treatment strategy to tackle this problem. Another very important aspect would be to communicate with patients and their families and ensure that their views are taken into account and their demands are also met. Family- based strategies such as involving them in oral health teaching and financial planning, may also help eliminate obstacles to treatment. (10,11)

### **Management of Psychosomatic Disorders of the Oral cavity**

Patients with severe psychiatric disorders, such as schizophrenia, bipolar disorder and major depressive disorders, have long been recognised to be highly vulnerable to poor oral health. Vulnerability to poor oral health has been identified by a wide range of factors such as psychological behavioural as well as pharmacologic considerations. These patients face a wide range of challenges in ensuring that they follow good oral hygiene habits in their daily lives, such as psychological considerations. These patients face wide range of challenges in ensuring that they follow good oral health to their overall wellbeing, as well as dental fear. Apart from these challenges, the side effects of psychotropic medications, such as the development of dry mouth symptoms

due to xerostomia, make them prone to conditions such as carious lesions and periodontal diseases. (11-14)

The link between oral health and mental health makes a unique niche for dentists to become an essential part of the diagnostic and care process. Oral problems such as grinding of teeth (bruxism), ulcers or unusual pain can often be a symptom of mental discomfort or mental illness. The dentist has a unique opportunity to diagnose such cases, often because the patients reluctant to approach mental health professionals. (10-14)

Various approaches are being employed and have proved highly effective in creating effective ways to manage oral issues related to such groups of people. These are:



1. Preventive Interventions: Routine dental visits, individualised oral hygiene instruction, and use of fluoride applications or rinses to prevent caries.

2. Dry Mouth: Distribution of saliva substitutes, fluid consumptions, and sugar-free chewing gum to help manage dryness of mouth.

3. Behavioural Therapies: Techniques such as desensitization for reducing dental anxiety and motivational interviewing for improving compliance with oral care practices.

4. Restorative and Specialized Care: Provides services to patients through dental fillings, extraction, periodontal procedures, and prosthetic care in relation to their restoration.

It is essential to note that equal weightage should be given to the support that can be provided by caregivers and the family. They play a very important role in ensuring that patients adhere to good practices of oral hygiene and also that they follow through with their appointments regarding dentistry and mental health care, thus addressing any issues they may be facing. (16,17,18,19)

Giving emphasis to oral health requirements of patients suffering from severe cases of mental illness has implications in enhancing their quality of life, as it emphasises the importance of physical health being a part of mental health services. (19,20)

### Conclusion

In light of above, it is clear that the problem of integration in mental and physical

healthcare needs systemic changes, which are working together and focusing on patients and family centred care. It is only by recognising and addressing these issues that is possible to ensure that patients are diagnosed and managed appropriately.

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