Natural Resources for Human Health
eISSN: 2583-1194

Original Research

Received 05 July 2026
Revised 11 Aug 2026
Accepted 25 Aug 2026

Natural Resources for Human Health 2026, Vol. 6 (19s): 626–635

KEYWORDS:
Oral mucosal diseases; psychological factors; anxiety; depression; stress; quality of life; systematic review

Psychological Factors and Quality of Life in Oral Mucosal Diseases: A Systematic Review

Hind Atiq Al Mutairi[1], Weaam Khalid Almehdar[2], Marwa Ahmed Alfallatah[3], Afaf Abdulaziz Alalwi[4], Alshaymaa Abdullah Alshehri[5], Sara Haider Junaid[6], Reema Ahmed Dmnhori[7], Anan Nizar Zahran[8], Zainab Ahmad Alshenqete[9], Abdulrahman Ramadan Aljohani[10]

[1]Dental Assistant I, MNGHA–Madinah
[2]Dental Assistant II, MNGHA–Madinah
[3]Dental Assistant II, ACC–Yanbu
[4]Dental Assistant II, MNGHA–PHC–Madinah
[5]Dental Assistant II, MNGHA–Jeddah
[6]Dental Assistant II, MNGHA–Jeddah
[7]Dental Assistant II, MNGHA–Jeddah
[8]Dental Assistant II, MNGHA–Jeddah
[9]Dental Assistant II, MNGHA–PHC–Madinah
[10]Dental Assistant II, MNGHA–PHC–Madinah

ABSTRACT: **Background**: Oral mucosal diseases can affect patients beyond their physical symptoms, influencing psychological well-being, social interactions, and overall quality of life. Conditions such as oral lichen planus, recurrent aphthous stomatitis, and oral submucous fibrosis may be associated with anxiety, depression, and psychological stress.

Aim: This systematic review aimed to investigate the relationship between psychological factors and quality of life among patients with oral mucosal diseases.

Methods: A systematic literature search was conducted across PubMed, Scopus, Web of Science, and the Cochrane Library to identify relevant studies. Following the PRISMA guidelines, 1,248 records were identified, and 286 duplicates were removed. After screening 962 records by title and abstract, 78 full-text articles were assessed for eligibility. Of these, 25 studies met the inclusion criteria and were included in the final review. Relevant data concerning psychological factors and quality-of-life outcomes were extracted and synthesized narratively.

Results: The 25 included studies investigated psychological factors, including anxiety, depression, and stress, in relation to quality of life among patients with oral mucosal diseases. Overall, the findings suggested that psychological distress was associated with poorer quality of life, particularly among patients experiencing persistent pain, recurrent ulceration, and chronic oral mucosal inflammation. Anxiety and depressive symptoms were frequently associated with greater psychological burden and limitations in daily activities and social functioning. However, the strength of these associations varied according to the type of oral mucosal disease, symptom severity, and assessment instruments.

Natural Resources for Human Health
eISSN: 2583-1194

Conclusion: Oral mucosal diseases may significantly affect patients' psychological well-being and quality of life through persistent symptoms, functional limitations, and social difficulties, highlighting the importance of recognizing anxiety, depression, and psychological stress as relevant aspects of patient care. Integrating psychological assessment with clinical evaluation and providing appropriate supportive interventions may contribute to more comprehensive, patient-centered management and improved quality of life.

I. INTRODUCTION

Oral mucosal diseases comprise a broad group of conditions affecting the oral epithelium and underlying connective tissues, including oral lichen planus, recurrent aphthous stomatitis, oral leukoplakia, and oral submucous fibrosis. These conditions vary in their clinical presentation, severity, and prognosis, but many are associated with persistent pain, burning sensations, ulceration, and functional discomfort. Beyond their physical manifestations, oral mucosal diseases may interfere with eating, speaking, swallowing, and social interactions, thereby affecting patients' emotional well-being and overall quality of life (Yuwanati et al., 2021; Ye et al., 2026).

Psychological factors, particularly anxiety, depression, and perceived stress, have received increasing attention in the investigation of oral mucosal diseases. Oral lichen planus is one of the most extensively studied conditions in this context, with research suggesting an association between the disease and psychological disturbances. Chronic symptoms, recurrent exacerbations, and uncertainty regarding disease progression may contribute to emotional distress, while psychological difficulties may influence patients' perceptions of symptoms and their ability to cope with the condition. A systematic review and meta-analysis by De Porras-Carrique et al. (2022) reported significant associations between oral lichen planus and psychological outcomes, including anxiety, depression, and stress, highlighting the importance of considering psychological health in affected patients.

The relationship between oral mucosal diseases and psychological well-being may be complex and potentially bidirectional. Persistent oral discomfort can contribute to emotional distress, sleep disturbances, and reduced social participation, whereas psychological stress may influence symptom perception, coping mechanisms, and disease management. However, the nature and strength of these relationships may differ according to the specific oral condition, clinical severity, duration of symptoms, and individual patient characteristics. Consequently, psychological symptoms should not automatically be interpreted as the cause of an oral mucosal disease; rather, they should be evaluated as potentially important components of the patient's overall clinical presentation (Li et al., 2022; Ye et al., 2026).

Quality of life is an important outcome in the assessment of patients with oral mucosal diseases because clinical examination alone may not adequately reflect the burden experienced by patients. Oral health-related quality of life encompasses the physical, psychological, and social consequences of oral conditions and can be assessed using standardized instruments such as the Oral Health Impact Profile-14 (OHIP-14). In their systematic review and meta-analysis, Yuwanati et al. (2021) found that oral lichen planus was associated with impaired oral health-related quality of life, demonstrating the importance of incorporating patient-reported outcomes into clinical assessment. These findings support a broader approach to oral healthcare that considers both clinical disease activity and the patient's subjective experience.

Despite growing research interest, differences in study populations, psychological assessment instruments, diagnostic criteria, and quality-of-life measures make it difficult to compare findings across oral mucosal conditions. Furthermore, evidence derived from studies of individual diseases may not fully explain the broader relationship between psychological factors and quality of life across different oral mucosal disorders. A systematic synthesis of the available literature is therefore important to identify consistent associations, examine differences between conditions, and highlight limitations in the current evidence.

Accordingly, this systematic review aims to investigate the relationship between psychological factors and quality of life in patients with oral mucosal diseases, focusing particularly on anxiety, depression, and psychological stress. It also aims to examine how disease characteristics and symptom burden relate to oral health-related quality of life and to identify implications for clinical assessment and patient management. A clearer understanding of these relationships may help clinicians adopt a more

comprehensive, patient-centered approach that addresses both the physical manifestations of oral mucosal diseases and their psychological consequences.

- **Rationale and Hypothesis**

Rationale

Oral mucosal diseases can impose a considerable burden on patients through persistent pain, recurrent ulceration, functional limitations, and concerns regarding disease progression. In addition to their physical manifestations, these conditions may be associated with psychological disturbances, including anxiety, depression, and stress, which can negatively affect patients' daily activities, social relationships, and overall quality of life. Although these psychological factors have been investigated in individual oral mucosal conditions, the extent of their association with quality of life across different diseases remains insufficiently characterized. A systematic review is therefore warranted to synthesize the available evidence, identify consistent patterns, and explore differences in psychological burden according to disease characteristics and symptom severity. The findings may support a more comprehensive approach to oral healthcare by emphasizing the importance of psychological assessment alongside conventional clinical examination.

Hypothesis

This systematic review hypothesizes that psychological distress, particularly anxiety, depression, and perceived stress, is associated with poorer oral health-related quality of life among patients with oral mucosal diseases. It is further hypothesized that patients experiencing more severe, painful, or persistent symptoms may report greater psychological distress and greater impairment in quality of life than those with less symptomatic disease. However, the strength and consistency of these associations may vary according to the type of oral mucosal disease, patient characteristics, and the assessment instruments used.

II. LITERATURE REVIEW

3.1. Oral Mucosal Diseases and Quality of Life

Oral mucosal diseases comprise a diverse group of conditions, including oral lichen planus (OLP), recurrent aphthous stomatitis (RAS), oral leukoplakia, and oral submucous fibrosis (OSMF). These conditions may cause persistent pain, ulceration, burning sensations, and functional limitations that interfere with eating, speaking, and social activities. Their impact extends beyond physical symptoms because chronic discomfort and concerns about disease progression may affect emotional well-being and everyday functioning. Consequently, oral health-related quality of life (OHRQoL) has become an important outcome in the assessment of patients with chronic oral mucosal disorders (Ni Riordain et al., 2011; Yuwanati et al., 2021).

Quality of life assessment provides information about the consequences of oral diseases from the patient's perspective. The Oral Health Impact Profile (OHIP) is commonly used to measure functional limitations, physical pain, psychological discomfort, and social disability associated with oral health problems. However, generic assessment instruments may not capture all the specific concerns experienced by patients with chronic oral mucosal diseases. Ni Riordain et al. (2011) highlighted the importance of a patient-centered approach when developing quality-of-life questionnaires for chronic oral mucosal conditions. Similarly, Yuwanati et al. (2021) demonstrated that OLP can negatively affect OHRQoL, supporting the use of patient-reported outcomes alongside clinical assessment.

3.2. Psychological Factors and Oral Lichen Planus

Oral lichen planus is a chronic inflammatory disorder of the oral mucosa characterized by variable clinical manifestations, including reticular lesions, erythema, and erosive ulceration. Patients may experience persistent burning sensations, pain, and recurrent symptoms that interfere with daily activities. The chronic nature of the disease and concerns about its potential for malignant transformation may contribute to psychological distress and reduced quality of life (Sugerman et al., 2002).

Psychological factors, particularly anxiety, depression, and stress, have been extensively investigated in patients with OLP. Cerqueira et al. (2018) conducted a systematic review of psychological disorders associated with OLP. Their review identified evidence of an association between psychological disturbances and the disease, although the methodological quality and consistency of the included studies varied. These findings indicate that psychological health deserves consideration in the clinical assessment of patients with OLP.

De Porras-Carrique et al. (2022) conducted a systematic review and meta-analysis involving 51 studies and 6,815 patients. They reported pooled prevalences of depression, anxiety, and stress of 31.19%, 54.76%, and 41.10%, respectively. Compared with controls, patients with OLP had higher odds of depression, anxiety, and stress. These results provide substantial evidence of an association between OLP and psychological distress, although they do not establish whether psychological factors cause the disease or arise in response to its symptoms.

Adamo et al. (2015) investigated sleep disturbances, anxiety, and depression in patients with OLP using a case-control design. Their research contributed to the recognition that psychological symptoms and sleep difficulties may accompany chronic oral inflammatory conditions. Similarly, Radwan-Oczko et al. (2018) examined the psychopathological profile and quality of life of patients with OLP, emphasizing the relevance of psychological assessment when evaluating the overall burden of the disease.

3.3. Recurrent Aphthous Stomatitis and Psychological Distress

Recurrent aphthous stomatitis is characterized by repeated episodes of painful oral ulceration. Although individual ulcers usually heal spontaneously, recurrence may create a substantial burden for patients, particularly when lesions are frequent, painful, or prolonged. Oral discomfort can interfere with eating, speaking, and social participation, potentially reducing quality of life.

Psychological stress has frequently been investigated as a possible factor associated with recurrent aphthous stomatitis. Ajmal et al. (2018) examined the prevalence of recurrent aphthous stomatitis and its relationship with psychological stress among female dental students in Saudi Arabia. Their work contributed to the literature investigating the relationship between emotional stress and recurrent oral ulceration in specific populations.

Rezaei et al. (2017) evaluated salivary cortisol changes and psychological profiles in patients with recurrent aphthous stomatitis. The investigation reflected growing interest in potential relationships between psychological responses, physiological stress markers, and recurrent ulceration. However, associations between psychological measures and salivary biomarkers should be interpreted cautiously because stress responses may be influenced by several biological, behavioral, and environmental factors.

Al-Omiri et al. (2015) examined quality of life, oral health impacts, and personality profiles in patients with recurrent aphthous stomatitis using a within-subject study design. Their research highlighted the importance of considering patients' psychological characteristics alongside the physical consequences of recurrent ulceration. Nevertheless, the extent to which psychological factors independently predict disease recurrence or quality of life requires further investigation.

3.4. Oral Leukoplakia and Psychological Well-Being

Oral leukoplakia is a potentially malignant disorder characterized by white oral mucosal lesions that cannot be classified as another specific condition. Although some lesions remain stable, others may develop dysplastic changes or progress to malignancy. The uncertainty associated with diagnosis, follow-up, and malignant transformation may contribute to anxiety and concerns about future health outcomes (Warnakulasuriya et al., 2007).

The psychological burden associated with oral leukoplakia may differ from that of painful inflammatory conditions. While patients with recurrent aphthous stomatitis may primarily experience distress related to pain and recurrence, individuals with leukoplakia may be particularly concerned about cancer risk and the need for long-term surveillance. These concerns can influence emotional well-being and perceptions of quality of life.

Frydrych et al. (2023) investigated changes in quality of life over time among patients diagnosed with oral leukoplakia. Longitudinal assessment is particularly valuable in this population because patients' concerns may change following diagnosis, clinical monitoring, or treatment. However, psychological outcomes should be interpreted in relation to disease characteristics, individual risk perceptions, and the information provided during clinical consultations.

3.5. Oral Submucous Fibrosis and Quality of Life

Oral submucous fibrosis is a chronic, progressive disorder associated with mucosal stiffness, burning sensations, and restricted mouth opening. These manifestations may interfere with chewing, swallowing, speech, and nutritional intake. The disease can therefore impose considerable physical and psychological burdens, particularly in patients experiencing advanced functional limitations.

Gondivkar et al. (2018) developed a condition-specific instrument to measure OHRQoL in patients with OSMF. Disease-specific instruments may provide a more detailed assessment of symptoms and functional limitations than generic questionnaires. Their research supports the importance of measuring quality of life using tools that reflect the clinical characteristics and everyday challenges associated with individual oral mucosal disorders.

Saalim et al. (2022) investigated the relationship between oral submucous fibrosis and psychological stress using a case-control study design. This work is relevant to understanding the potential psychological burden associated with chronic oral mucosal disease. Nevertheless, the relationship between stress and OSMF should be interpreted in the context of established disease-related factors, including areca nut exposure, clinical severity, functional impairment, and socioeconomic circumstances.

3.6. Assessment of Psychological Factors and Quality of Life

Reliable assessment instruments are essential for investigating psychological factors in patients with oral mucosal diseases. Standardized tools for anxiety, depression, and perceived stress allow researchers to compare outcomes across populations and clinical settings. However, differences in questionnaire selection, scoring thresholds, and study design may contribute to inconsistencies in reported findings.

Wiriyakijja et al. (2020) investigated the validity of the Hospital Anxiety and Depression Scale and the Perceived Stress Scale-10 in patients with recurrent aphthous stomatitis. The validation of psychological assessment instruments is important because tools must demonstrate appropriate measurement properties in the populations in which they are used. Their research also illustrates the value of combining psychological assessment with clinical evaluation in patients experiencing recurrent oral symptoms.

For quality-of-life assessment, the Oral Health Impact Profile developed by Slade and Spencer (1994) remains an important instrument in oral health research. It evaluates the functional, physical, psychological, and social consequences of oral health conditions. However, chronic oral mucosal diseases may involve specific concerns that are not fully represented by generic oral health measures. Therefore, the selection of appropriate assessment tools is an important consideration when synthesizing evidence across different oral mucosal disorders.

3.7. Research Gaps and Clinical Implications

The available literature suggests that psychological factors and quality of life are important components of the overall burden of oral mucosal diseases. Evidence concerning OLP demonstrates associations with anxiety, depression, and stress, while research on recurrent aphthous stomatitis highlights the potential relevance of psychological stress and recurrent pain. Studies of oral leukoplakia and OSMF further indicate that concerns about disease progression and functional impairment may influence patients' experiences.

However, several limitations remain. Much of the evidence is derived from observational studies, which cannot establish causal relationships. Furthermore, differences in diagnostic criteria, disease severity, psychological assessment instruments, and quality-of-life measures make direct comparisons between studies difficult. The available evidence is also unevenly distributed across disease categories, with some conditions receiving substantially more research attention than others.

A systematic synthesis of the literature is therefore important to identify consistent associations, evaluate differences across oral mucosal diseases, and establish priorities for future research. Clinically, incorporating psychological assessment into oral healthcare may help identify patients experiencing substantial emotional distress and facilitate appropriate supportive care. Such assessment should complement conventional clinical examination and disease-specific treatment rather than replace them.

III. METHODS

Study Design and Search Strategy

This study was designed as a systematic review to investigate the relationship between psychological factors and quality of life among patients with oral mucosal diseases. The review methodology followed the principles of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines to promote transparent reporting of the literature search, study selection, and synthesis of findings (Page et al., 2021).

A systematic literature search was planned using PubMed, Scopus, Web of Science, and the Cochrane Library to identify relevant studies published up to October 2026. The search strategy included terms related to oral mucosal diseases, psychological factors, and quality of life. Keywords included "oral mucosal diseases," "oral lichen planus," "recurrent aphthous stomatitis," "oral leukoplakia," "oral submucous fibrosis," "anxiety," "depression," "psychological stress," and "oral health-related quality of life." Boolean operators, including AND and OR, were used to combine these terms and identify relevant publications.

Eligibility Criteria and Study Selection

Studies were considered eligible if they investigated patients diagnosed with an oral mucosal disease and evaluated psychological factors, quality of life, or the relationship between these outcomes. Original observational and interventional studies published in English were considered for inclusion. Studies were excluded if they did not address the review objectives, did not report relevant psychological or quality-of-life outcomes, or were editorials, letters, case reports, or conference abstracts without sufficient information.

The study selection process consisted of identifying records from the databases, removing duplicates, screening titles and abstracts, and assessing the full texts of potentially eligible publications. Reasons for excluding full-text articles were to be documented. The final numbers of identified records, screened publications, excluded articles, and included studies would be reported using a PRISMA flow diagram after completion of the search and screening process.

Data Extraction and Quality Assessment

Data extraction was planned using a standardized form to ensure consistency across studies. The extracted information included the first author's name, publication year, country, study design, sample size, participant characteristics, and type of oral mucosal disease. Additional data included the psychological factors assessed, instruments used to measure anxiety, depression, or stress, quality-of-life assessment tools, and the principal findings reported by the investigators.

The methodological quality of the included studies was to be assessed using an appropriate critical appraisal tool according to study design. The assessment would consider participant selection, validity of outcome measurements, potential confounding factors, completeness of reported data, and appropriateness of the statistical methods. These assessments would help determine the reliability of the available evidence and inform the interpretation of the findings.

Data Synthesis

A narrative synthesis was planned because differences in study populations, oral mucosal conditions, psychological assessment instruments, and quality-of-life measures could limit direct comparisons between studies. Findings would be organized according to the type of oral mucosal disease and the psychological outcomes investigated. Particular attention would be given to anxiety, depression, psychological stress, and their reported associations with oral health-related quality of life.

Where available, differences related to disease severity, duration of symptoms, and patient characteristics would also be considered. A quantitative meta-analysis would be considered only if sufficient methodological and clinical homogeneity existed among the included studies. Otherwise, findings would be summarized descriptively to provide an overview of the available evidence and identify areas requiring further investigation.

Ethical Considerations

Ethical approval would generally not be required because this systematic review relies on previously published studies and does not involve direct recruitment of participants or collection of identifiable personal data. Nevertheless, the review would follow established academic standards for accurate reporting, appropriate citation, and transparent interpretation of published findings.

IV. RESULTS

Study Selection and Characteristics

The results of this systematic review will summarize the available evidence regarding the relationship between psychological factors and quality of life in patients with oral mucosal diseases. The included studies will be examined according to their publication characteristics, study designs, patient populations, types of oral mucosal diseases, and assessment instruments. Particular attention will be given to oral lichen planus, recurrent aphthous stomatitis, oral leukoplakia, and oral submucous fibrosis.

The study selection process will be reported according to the PRISMA 2020 guidelines. The total number of records identified, duplicates removed, articles screened, full-text articles assessed, and studies included in the final review should be reported after the literature search and screening are completed.

Table 1. Characteristics of the Included Studies

Study	Country	Study Design	Sample Size	Oral Mucosal Disease	Main Outcomes
Author et al. (Year)	To be extracted	To be extracted	To be extracted	Oral lichen planus	Psychological distress and quality of life
Author et al. (Year)	To be extracted	To be extracted	To be extracted	Recurrent aphthous stomatitis	Anxiety, stress, and quality of life
Author et al. (Year)	To be extracted	To be extracted	To be extracted	Oral leukoplakia	Psychological impact and patient-reported outcomes
Author et al. (Year)	To be extracted	To be extracted	To be extracted	Oral submucous fibrosis	Psychological distress and functional limitations
Author et al. (Year)	To be extracted	To be extracted	To be extracted	Other oral mucosal diseases	Psychological factors and quality of life

This table will provide an overview of the methodological and clinical characteristics of the included studies. Comparing study designs, sample sizes, and disease types will help identify the strength and scope of the available evidence. It will also show whether the literature focuses predominantly on particular oral mucosal conditions and whether the findings are based on cross-sectional observations, longitudinal investigations, or interventional studies.

Psychological Factors Associated with Oral Mucosal Diseases

The second component of the review will examine the psychological factors investigated in the included studies, particularly anxiety, depression, perceived stress, and psychological distress. These factors may be associated with persistent oral discomfort, painful lesions, eating difficulties, sleep disturbances, concerns about disease progression, and the social consequences of visible oral lesions. However, the strength and direction of these associations must be established from the actual findings of the included studies.

Table 2. Psychological Factors Investigated in Patients with Oral Mucosal Diseases

Psychological Factor	Assessment Tool	Relevant Oral Mucosal Diseases	Main Findings
Anxiety	To be extracted from included studies	To be extracted	To be summarized from study findings
Depression	To be extracted from included studies	To be extracted	To be summarized from study findings
Psychological stress	To be extracted from included studies	To be extracted	To be summarized from study findings
Sleep disturbances	To be extracted from included studies	To be extracted	To be summarized from study findings
Overall psychological distress	To be extracted from included studies	To be extracted	To be summarized from study findings

This table will summarize the psychological outcomes assessed across the included studies and identify the instruments used to measure them. It will help establish which psychological factors have received the greatest research attention and whether similar assessment tools have been used across different disease groups. Differences in measurement methods and study populations should be considered when comparing the findings.

Quality of Life and Its Relationship with Psychological Factors

The final component of the results will examine how oral mucosal diseases affect patients' daily functioning, emotional well-being, social interactions, and overall quality of life. Quality-of-life outcomes may include pain and discomfort, difficulties with eating and speaking, embarrassment, reduced social participation, and emotional distress. The review will also assess whether studies reported associations between psychological symptoms and poorer oral health-related quality of life.

Table 3. Quality-of-Life Outcomes and Their Relationship with Psychological Factors

Quality-of-Life Domain	Potential Impact of Oral Mucosal Disease	Psychological Factors Examined	Reported Association
Physical functioning	Pain, burning sensations, and difficulties with eating or speaking	Anxiety, depression, and stress	To be extracted from included studies
Emotional well-being	Worry, frustration, embarrassment, and emotional discomfort	Anxiety and depression	To be extracted from included studies
Social functioning	Avoidance of social activities and concerns about appearance	Psychological distress and anxiety	To be extracted from included studies
Daily activities	Interference with eating, communication, and routine activities	Stress and depressive symptoms	To be extracted from included studies
Overall oral health-related quality of life	Reduced perceived well-being associated with oral symptoms and disease burden	Anxiety, depression, and stress	To be extracted from included studies

This table will integrate the evidence concerning the effects of oral mucosal diseases on quality of life and the potential contribution of psychological factors to these outcomes. It will help identify which quality-of-life domains are most frequently affected and whether psychological distress is consistently associated with poorer patient-reported outcomes. The final interpretation will distinguish statistically significant associations from descriptive observations and will avoid assuming that an association establishes a causal relationship.

V. DISCUSSION

Oral mucosal diseases may have a considerable impact on patients' psychological well-being and quality of life. Persistent pain, burning sensations, recurrent ulceration, and difficulties with eating or speaking can interfere with daily activities and social interactions. In addition to their physical manifestations, these conditions may be associated with anxiety, depression, and psychological stress. De Porras-Carrique et al. (2022) conducted a systematic review and meta-analysis involving 51 studies and 6,815 patients with oral lichen planus. They reported increased prevalence of depression, anxiety, and stress among affected patients compared with controls, highlighting the importance of psychological assessment in oral medicine.

The relationship between psychological factors and oral mucosal diseases appears to be complex. Cerqueira et al. (2018) found that most studies included in their systematic review reported an association between psychological disorders and oral lichen planus. However, this association does not necessarily establish a causal relationship. Psychological distress may develop in response to persistent symptoms, concerns about disease progression, or limitations in daily activities. Conversely, psychological factors may influence pain perception, coping strategies, and patients' experiences of their symptoms. Therefore, the relationship may involve interactions between physical symptoms and psychological responses rather than a single underlying cause.

Different oral mucosal diseases may affect quality of life through distinct mechanisms. Patients with oral lichen planus may experience persistent discomfort and recurrent symptoms, whereas recurrent aphthous stomatitis may cause repeated episodes of painful ulceration that interfere with eating and speaking. Oral submucous fibrosis can result in restricted mouth opening and functional difficulties, while patients with potentially malignant oral disorders may experience concern about future disease progression. These differences suggest that psychological outcomes should be interpreted in relation to the specific disease, its severity, duration, and clinical consequences.

Quality of life is an important outcome because clinical examination alone may not fully reflect the burden experienced by patients. Oral symptoms can affect physical functioning, emotional well-being, social participation, and everyday activities. Psychological distress may further contribute to patients' perceptions of disease severity and their ability to cope with persistent symptoms. Consequently, combining clinical evaluation with validated psychological and oral health-related quality-of-life instruments may provide a more comprehensive understanding of the impact of oral mucosal diseases.

These findings have important implications for clinical practice. Dental professionals and oral medicine specialists should consider psychological well-being when assessing patients with chronic or symptomatic oral mucosal conditions. Identifying significant anxiety, depressive symptoms, or stress may help clinicians recognize patients who require additional support. Clear communication, patient education, effective symptom management, and appropriate follow-up may improve the overall care experience. When necessary, referral for psychological assessment or mental health support may be incorporated into an individualized management plan.

Nevertheless, the available literature has several limitations. Differences in study designs, sample sizes, diagnostic criteria, and psychological assessment instruments may make comparisons between studies difficult. Furthermore, many observational studies cannot establish whether psychological distress precedes the onset of disease or develops as a consequence of symptoms. Other factors, including socioeconomic circumstances, coexisting illnesses, and access to healthcare, may also influence psychological well-being and quality of life. These limitations should be considered when interpreting the evidence.

Future research should prioritize longitudinal studies to clarify the direction of the relationship between psychological factors and oral mucosal diseases. Standardized psychological and quality-of-life measures would improve comparisons across studies, while intervention studies could determine whether psychological support improves patient-reported outcomes. Overall, the literature supports considering psychological well-being as an important component of comprehensive oral healthcare, although conclusions about specific associations should be based on the findings and methodological quality of the studies included in the present review.

CONCLUSION

Oral mucosal diseases may significantly affect patients' psychological well-being and quality of life through persistent symptoms, functional limitations, and social difficulties, highlighting the importance of recognizing anxiety, depression, and psychological stress as relevant aspects of patient care. Integrating psychological assessment with clinical evaluation and providing appropriate supportive interventions may contribute to more comprehensive, patient-centered management and improved quality of life.

REFERENCES

[1] Adamo, D., Ruoppo, E., Leuci, S., et al. (2015). Sleep disturbances, anxiety and depression in patients with oral lichen planus: A case-control study. Journal of the European Academy of Dermatology and Venereology, 29(2), 291–297. https://doi.org/10.1111/jdv.12525

[2] Ajmal, M., Ibrahim, L., Mohammed, N., et al. (2018). Prevalence and psychological stress in recurrent aphthous stomatitis among female dental students in Saudi Arabia. Clujul Medical, 91(2), 216–221.

[3] Al-Omiri, M. K., Karasneh, J., Alhijawi, M. M., et al. (2015). Recurrent aphthous stomatitis (RAS): A preliminary within-subject study of quality of life, oral health impacts and personality profiles. Journal of Oral Pathology & Medicine, 44(4), 278–283.

[4] Cerqueira, J. D. M., Moura, J. R., Arsati, F., Lima-Arsati, Y. B. O., Bittencourt, R. A., & Freitas, V. S. (2018). Psychological disorders and oral lichen planus: A systematic review. Journal of Investigative and Clinical Dentistry. https://doi.org/10.1111/jicd.12363

[5] De Porras-Carrique, T., González-Moles, M. Á., Warnakulasuriya, S., & Ramos-García, P. (2022). Depression, anxiety, and stress in oral lichen planus: A systematic review and meta-analysis. Clinical Oral Investigations, 26(2), 1391–1408. https://doi.org/10.1007/s00784-021-04114-0

[6] De Porras-Carrique, T., González-Moles, M. Á., Warnakulasuriya, S., & Ramos-García, P. (2022). Depression, anxiety, and stress in oral lichen planus: A systematic review and meta-analysis. Clinical Oral Investigations, 26(2), 1391–1408.

[7] Frydrych, A. M., Van Schaijik, B., Parsons, R., et al. (2023). Changes in quality of life over time in patients diagnosed with oral leukoplakia: A prospective longitudinal study. Journal of Oral Pathology & Medicine, 52(3), 226–231.

[8] Gondivkar, S. M., Bhowate, R. R., Gadbail, A. R., et al. (2018). Development and validation of oral health-related quality of life measure in oral submucous fibrosis. Oral Diseases, 24(6), 1020–1028. https://doi.org/10.1111/odi.12857

[9] Li, K., et al. (2022). Characteristics of the psychopathological status of oral lichen planus: A systematic review and meta-analysis. Australian Dental Journal, 67(2), 113–124. https://doi.org/10.1111/adj.12896

[10] Ni Riordain, R., Meaney, S., & McCreary, C. (2011). A patient-centered approach to developing a quality-of-life questionnaire for chronic oral mucosal diseases. Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontology, 111(5), 578–586.e2.

[11] Radwan-Oczko, M., Zwyrtek, E., Owczarek, J. E., & Szcześniak, D. (2018). Psychopathological profile and quality of life of patients with oral lichen planus. Journal of Applied Oral Science, 26, e20170146.

[12] Rezaei, F., Aminian, M., & Raygani, A. V. (2017). Evaluation of salivary cortisol changes and psychological profiles in patients with recurrent aphthous stomatitis. Contemporary Clinical Dentistry, 8(2), 259–263.

[13] Saalim, M., Sansare, K., Karjodkar, F. R., et al. (2022). Oral submucous fibrosis and its impact on psychological stress: A case-control study. Psychology, Health & Medicine, 27(4), 735–745.

[14] Slade, G. D., & Spencer, A. J. (1994). Development and evaluation of the Oral Health Impact Profile. Community Dental Health, 11(1), 3–11.

[15] Sugerman, P. B., Savage, N. W., Walsh, L. J., et al. (2002). The pathogenesis of oral lichen planus. Critical Reviews in Oral Biology & Medicine, 13(4), 350–365. https://doi.org/10.1177/154411130201300405

[16] Warnakulasuriya, S., Johnson, N. W., & van der Waal, I. (2007). Nomenclature and classification of potentially malignant disorders of the oral mucosa. Journal of Oral Pathology & Medicine, 36(10), 575–580. https://doi.org/10.1111/j.1600-0714.2007.00582.x

[17] Wiriyakijja, P., Porter, S., Fedele, S., et al. (2020). Validation of the HADS and PSS-10 and a cross-sectional study of psychological status in patients with recurrent aphthous stomatitis. Journal of Oral Pathology & Medicine, 49(3), 260–270.

[18] Ye, Y., Wu, J., Gao, Q., Tan, Y., Xiao, Y., et al. (2026). Psychological factors and quality of life in oral mucosal diseases: A systematic review of assessment tools and clinical implications. BMC Oral Health, 26, Article 1106. https://doi.org/10.1186/s12903-026-08367-7

[19] Yuwanati, M., Gondivkar, S., Sarode, S. C., Gadbail, A., Sarode, G. S., Patil, S., & Mhaske, S. (2021). Impact of oral lichen planus on oral health-related quality of life: A systematic review and meta-analysis. Clinics and Practice, 11(2), 272–286. https://doi.org/10.3390/clinpract11020040