

# Impact of Communication on Oral Potentially Malignant Disorders

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There are no communication protocols for patients who are diagnosed with Oral Potentially Malignant Disorders (OPMDs). Healthcare professionals must develop and practice communication skills throughout their training and practice, starting by incorporating specific training in the dental school curriculum. Due to the limitation in the time available in clinical settings, developing and making available an easily accessible and accurate web-based patient information sheet that could be recommended to an OPMD patient should be considered by professional bodies.

Keywords: oral potentially malignant disorders ; communication ; truth-telling

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## 1. Introduction

Oral potentially malignant disorders (OPMDs) are a group of conditions that predispose oral mucosa to malignant transformation, specifically to oral squamous cell carcinoma (OSCC), the most common head and neck cancer in adults. Although only a proportion of these disorders progress to cancer, early diagnosis is particularly important given the high mortality rate of late-stage OSCC <sup>[1]</sup>.

It has been estimated that the overall worldwide prevalence of OPMDs is around 4.5%, with wide differences according to geographic region <sup>[2]</sup>. Although the overall malignant transformation rate across all OPMD groups is relatively low (7.9%), and each type of disorder has a highly variable rate of transformation (ranging from 1.4% to 49.5%), the risk of progression to OSCC is always a possibility and should be considered in the clinical follow-up of all patients affected by OPMDs <sup>[3]</sup>. Although any patient presenting with an OPMD has an increased risk to develop oral cancer at present we cannot precisely predict who may develop a malignancy.

The OPMDs present heterogeneous etiologies and their biology is characterized by mutations in the genetic codes of oral epithelial cells with or without clinical and histomorphological alterations that may lead to OSCC development <sup>[4]</sup>. According to the World Health Organization Collaborating Centre for Oral Cancer (2020), the OPMD group is composed of: leukoplakia, proliferative verrucous leukoplakia (PVL), erythroplakia, oral submucous fibrosis (OSF), oral lichen planus (OLP), actinic keratosis (actinic cheilitis) (AK/AC), palatal lesions in reverse smokers, oral lupus erythematosus (OLE), dyskeratosis congenita (DC), oral lichenoid lesion (OLL), and oral graft versus host disease (OGVHD) <sup>[1]</sup>.

Communication with the patient has been recognized as one of the most important skills used by practitioners to help approach difficult issues and focus on patients' values and preferences. Professional–patient communication has several potential positive outcomes, including reduced patient anxiety, increased patient satisfaction, motivation and adherence to healthy behaviors, and better oral health outcomes <sup>[5][6][7]</sup>. Delivering bad news has been widely studied in oncological settings, however, communication protocols for patients diagnosed with OPMDs are unknown, even with knowing the clinical and psychosocial impact.

## 2. Impact of Communication on Oral Potentially Malignant Disorders

### 2.1. Challenges for Professionals in Delivering Bad News Regarding OPMDs

There are protocols based on communicating bad news in the medical context and, in relation to the dentistry field, a recent review of the communication protocols in oral cancer patients showed available models such as SPIKES and ABCDE which recommend communication techniques considering patients' preferences <sup>[7][8]</sup>. In a personal-view study on telling the truth to patients with cancer, the author highlighted the following which could also be applicable in the context of OPMDs: “when the relationship between patients and their oncologists is recognized as an open-ended dynamic process

of ascertainment and constant reassessment of a truth shared between them, it acquires a different strength and character. Truth-telling then becomes a bidirectional process aimed at constructing—rather than merely discovering—the truth and at helping people with cancer to make sense of having and living with their disease” [6].

OPMD communication carries several challenging points for professionals, as there is still controversy about the different diagnostic techniques, the correlation with the histopathological characteristics, the uncertainties with the choice of treatment, and the probability of disease recurrence or turning into cancer, among others. All this means that the scientific evidence has not yet reached consensus or uniformity with the different techniques of diagnosis, treatment, and follow-up [9][10]. Variation in clinical practice is widely recognised.

Health literacy has been reported as one of the most important factors to take into consideration when communicating bad news and represents a challenge for health professionals, as several studies demonstrate the difficulty of communication with patients possessing inadequate health literacy [11][12]. In oncology, for example, one study showed that adequate health literacy is necessary in terms of understanding and using cancer prevention and early detection strategies. In addition, patients are unaware of the main symptoms and signs of cancer, which may lead to a late diagnosis. On the other hand, there are verbal and written communication barriers that generate difficulties in relation to cancer treatment, as there are risks and benefits that must be understood and communicated correctly prior to decision-making [13]. The aforementioned challenge shows that we must take into account patient's health literacy when communicating about an OPMD since knowing the patient's health literacy level can help with the necessary tools, as well as the appropriate words, to deliver the OPMD diagnosis.

## **2.2. Communication about Risk Factors Related to OPMDs**

There is a group of known risk factors associated with OPMDs such as tobacco use, alcohol consumption, betel quid chewing, sun exposure, and, to a lesser extent, the transmitted infection of human papillomavirus (HPV, mainly type 16) and oral microbiome alteration, among others, that are well recognized [14]. Communication on the risk factors was shown in one study that reported proactivity by dentists in talking about smoking cessation, however, some of the professionals were not comfortable talking about discussing alcohol as a risk factor or quitting/the moderation of alcohol use [15]. Communication on risk factors directly depends on the geographic region and the prevalence of OPMD as certain cultural risk factors influence the type and pattern of disorders. For example, betel quid/areca nut chewing habits are widely prevalent in South Asian populations, resulting in a greater prevalence of OPMDs [16]. Another challenging component in risk factor communication is when an OPMD is found in patients with different epidemiological profiles and with no exposure to an environmental factor, in other words, factors other than tobacco and alcohol may be implicated in the development of oral cancer as encountered in some younger patients. The dentist must be able to provide a balanced biological context for patients' questions about their OPMD diagnosis and the absence of external risk factors as well when they are working with people exposed to risk factors without a diagnosis of OPMD.

## **2.3. Communication about Rates of Malignant Transformation**

Reporting rates of malignant transformation must be within the demographic and clinicopathological context of each patient, as each type of OPMD has a highly variable rate of malignant transformation [3]. Currently, the grade of epithelial dysplasia present within an OPMD is seen as the most reliable marker for malignant transformation [17]. However, investigations on the molecular techniques used for assessing the prognostic value of biomarkers for OPMD are still insufficient to support malignant transformation, especially regarding their clinical application [4].

## **2.4. Treatment-Related Communication**

Treatment-related communication in the OPMD context is also complicated by a lack of robust evidence concerning both the treatment effectiveness for OPMDs and future OSCC risk [18]. The decisions related to the type of treatment are the most controversial in the literature since this decision should be based on the published evidence, circumstances, and context of each patient. It is necessary to inform the patient about the uncertainties in the outcomes of treatment and always lay out the facts so they do not feel disappointed when having to repeat the same intervention or change the direction of management [11]. Follow-up protocols change depending on the type of OPMD. Furthermore, there is no consensus on the specific time interval for follow-up/surveillance as there are no studies showing efficacy regarding better clinical outcomes [9][10]. However, periodic follow-up visits are advised in all OPMD cases [19]. Patients must understand that, although the time interval depends on clinical criteria, patient's preference they will need to undergo lifelong follow-up.

## 2.5. Communicating Clinical/Psychosocial Implications to Patients

No specific protocol studies were found to learn about communicating the clinical and psychological impacts on patients who are diagnosed with OPMD. However, scholars observed that there are several studies concerning the quality of life of patients diagnosed with OPMDs, particularly, those related to lichen planus, leukoplakia, and oral submucous fibrosis [11][20][21][22][23][24]. The findings of these studies suggested that, in general, the signs and symptoms generated by OPMDs are the most important factors due to physical impairment and functional limitations. OPMD has a debilitating effect on psychological well-being and social interactions, thus, patients should be informed about future physical and psychosocial problems and try to delineate treatment plans focused on reducing these impacts.

## 2.6. Patients' Preferences on OPMD Communication

The patient's perception of the OPMD diagnostic process has been reported in screening studies and diagnostic test accuracies that reported patients' values and preferences in the assessment of clinically evident lesions in the oral cavity [19][25]. The three main topics reported by the authors were: (i) fear and anxiety as some of the most relevant barriers to seeking care; (ii) the acceptability of conducting a clinical examination to identify OPMD; and the last and most important: (iii) participants highlighting an interest in being educated about ways to reduce their risk of having oral cancer and suggesting that mass media coverage could be an effective way to increase awareness about the early manifestation of OPMD and OSCC. Nevertheless, the authors conclude that more information on patients' values and preferences is required [19]. Studies on web-based information have revealed the presence of misinformation in the electronic media on the subject of OPMDs and the necessity to develop and portray accurate information on this topic to the general public [26][27]. Professional organizations concerned with oral medicine have a duty to publish such electronic patient information leaflets.

## 2.7. General Recommendations on OPMD Communication

The diagnosis of OPMD can occur in private practice by a clinician or at academic institutions. Thus, communication skills are recommended as part of the curriculum in dental schools [28]. Breaking bad news might not only be challenging for the patient and caregivers but also for a student without any experience [29]. Worked examples and simulated patients are resourceful strategies that could help with teaching these difficult communication skills to students [29][30][31]. Communication skill training could also include role-play sessions, videos on patient communications, presentations, and experience sharing from tutors and senior students [32].

The findings clearly indicate that more qualitative investigations are needed to determine communication protocols for each type of OPMD as well as to identify the perception of professionals and patients. As noted, only leukoplakia was directly related to communication, and its author outlined relevant information on how this information should be reported to a patient [9][10]. Therefore, it is necessary to implement adequate communication strategies and to provide effective communication protocols for a full range of OPMDs.

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