






Teledentistry in Oral Diagnostic: Unveiled Myths and Challenges to Be Overcome

Livian Isabel de Medeiros Carvalho¹, Eduarda Gomes Onofre de Araújo¹, Hélder Domiciano Dantas Martins¹, Edson Hilan Gomes de Lucena¹, Paulo Rogério Ferreti Bonan¹

¹Dentistry PostGraduate Program, Federal University of Paraíba, João Pessoa, PB, Brazil.

Corresponding author: Livian Isabel de Medeiros Carvalho

E-mail: carvalholivianmed@gmail.com

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ABSTRACT

Objective: To reveal the capabilities of the Teleinterconsulting application in Stomatology, shedding light on how this tool operates within our own experience. **Material and Methods:** This observational and cross-sectional study was carried out using data obtained from the pilot study of the Teleinterconsulta application in Stomatology in Paraíba, Brazil, from April 2021 to October 2023. A descriptive analysis of the data was carried out, including an analysis of the experiences of the situation. **Results:** This study involved the participation of 22 dentists who acted as consultants in the application, which already has more than 400 registered dentists who participate in the healthcare network. **Conclusion:** Teleconsultation in Stomatology can be a powerful tool that can contribute to the early diagnosis of potentially malignant diseases. We anticipate that this brief communication will inspire professionals to adopt and integrate technologies that allow teleconsultation, promoting greater openness to e-health practices.

Keywords: Information Technology; Remote Consultation; Mobile Applications; Diagnosis, Oral.

■ Introduction

The COVID-19 pandemic had consequences that substantiated the perception of human vulnerability in facing health challenges. The emergence of an unknown virus forced the restructuring of social life, imposing the need for isolation and distancing measures and rethinking the format of face-to-face interpersonal relationships. Soon, face-to-face contact was replaced by online meetings in the most diverse activities related to Dentistry.

In Brazil, the federal authority that regulates the practice of the profession, the Federal Council of Dentistry, has already established regulations that support the use of teledentistry in specific situations, such as monitoring, guidance, and consulting between professionals remotely [1].

Since then, teledentistry has become popular as a viable tool. Therefore, it was necessary to develop platforms to enable this remote service effectively, avoiding informal means such as Whatsapp®. In this context, to bring practicality and security to the distance consulting modality, the Digital Dentistry Laboratory (DDL) from the Federal University of Paraíba developed a smartphone application to provide contact between dentistry professionals, especially concerning oral diseases. The app works as a communication platform that offers specialized support in this area, primarily due to the difficulty that professionals usually have in this field.

The fundamental premise of this application consists of a dentist from a public health service (primary, secondary, or tertiary) (applicant) sending a clinical case through the platform and promptly receiving orientations from a dentist specialized in oral medicine (consultant) regarding the clinical diagnosis and the conduct to be performed. Furthermore, an important aspect is the need for more oral medicine professionals. Thus, we aim to bring this expertise to more remote regions and provide rapid and reliable diagnostic hypotheses, which can be extremely important in diagnosing malignant and potentially malignant lesions, for example.

Nevertheless, despite the application's potential, this new tool may raise concerns among professionals, especially those used exclusively in the traditional and face-to-face dentistry practice. Therefore, it is essential to demystify and support the possibilities of remote inter-consulting proposed by the Teleinterconsulting application in Stomatology in Paraíba, Brazil.

■ Myths and Challenges

"It is an Illegal Practice."

According to a recent study conducted by Raucci-Neto et al. [2], Brazilian dentists' knowledge of the resolution that regulates teledentistry in the country is superficial and insufficient. Thus, the need for knowledge about the activities authorized by Resolution 226/2020 [1] is understood.

This resolution provides for the practice of dentistry remotely mediated by technologies, allowing remote monitoring, guidance, and consultancy, the latter being the basic competence of the application. Hence, the current resolution supports teleconsultation. Although this resolution has not been updated since its publication, it is estimated that new regulations will be issued to consolidate this scenario further due to the continuous advances in teledentistry.

Thus, between 2021 and 2023, we carried out training with the support of the state oral health coordination to improve understanding of these aspects and explain the use and objectives of the application. As a result, we have more than 400 dentists working in the state's public network registered in the application and able to report their cases, evidencing the excellent adherence of professionals.

"Using the App is Difficult"

Using an application focused on teledentistry may raise doubts among professionals unfamiliar with e-health proposals, and these questions may discourage professionals from using the app [3]. The System Usability Scale (SUS) was used to evaluate usability. The scale measures technology's ease and practicality [4]. Accordingly, 101 participants answered a questionnaire, and an average usability of 91.25 was observed [5]. This result shows that, although it is a new device, the application has achieved excellent usability parameters. Therefore, professionals are expected to be more receptive to the application and its functionalities and, consequently, be able to report more cases.

"The Consultant's Response is Lengthy"

One of the main objectives of the application is to bring celerity and resoluteness to the diagnostic process. Therefore, our goal is that the consultant's response is provided quickly to the requesting professional, and the cases are answered on the same day or within 48 hours after sending. This significantly influences the celerity of the diagnosis since, based on the consultant's guidance, the professional will be able to establish the diagnosis and consequently begin the treatment.

"Diagnoses are Inaccurate"

Receiving orientation from an unknown consultant may raise questions about the accuracy of the information. However, to minimize this insecurity, the team comprises professionals trained in oral diagnosis. In addition, it is worth mentioning that a consultant's response results from a collaborative discussion among 22 dentists who make up the team, bringing different perspectives about the diagnosis and the steps that can be taken in the face of the situation experienced by the requesting professional.






This diversity of experiences is one of the tool's strengths, as it allows consultants to analyze clinical cases comprehensively, considering different diagnostic and therapeutic approaches. Another positive aspect of the discussions fostered by the submitted cases is creating a space for continuous education and professional development of the consultants, enhancing the quality of the guidance provided. Furthermore, in the cross-sectional study conducted by Martins et al. [6] regarding this application, an overall agreement of 64.1% was observed between the applicants' hypotheses and the consultants' proposals, thereby reaffirming the accuracy of the diagnostic process facilitated by the application.

In summary, the collaborative approach of the team, composed of professionals with training and experience, provides precise answers and diagnoses for the submitted clinical cases to the application's users. Therefore, a reliable diagnosis and assertive guidance are expected from the requesting professionals.

■ Conclusion

The Teleinterconsulting application in Stomatology in Paraíba can be a promising resource to facilitate communication between requesting professionals and specialists in Oral Diagnosis, providing an opportunity to expedite diagnosing conditions of the stomatognathic complex. Many doubts and uncertainties surrounding this new technology can be overcome by properly understanding how the application functions as a viable tool for Teleinterconsultation. Therefore, comprehending and clarifying myths and doubts is the first step to sensitizing dentists to embrace this innovation, even contributing to diagnosing malignant conditions.

■ Authors' Contributions

LIMC		https://orcid.org/0000-0001-7605-1523	Conceptualization, Writing - Original Draft and Writing - Review and Editing.
EGOA		https://orcid.org/0000-0001-7107-6107	Conceptualization, Writing - Original Draft and Writing - Review and Editing.
HDDM		https://orcid.org/0000-0001-7685-0843	Validation, Writing - Review and Editing and Supervision.
EHGL		https://orcid.org/0000-0003-3431-115X	Validation, Supervision and Project Administration.
PRFB		https://orcid.org/0000-0002-4449-4343	Validation, Supervision and Project Administration.

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■ Conflict of Interest

The authors declare no conflicts of interest.

■ Data Availability

The data used to support the findings of this study can be made available upon request to the corresponding author.

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