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#### **Documents**

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Orthodontic Patient's Perspectives, Attitudes, and Readiness Toward Teleorthodontics (2024) *Journal of International Oral Health*, 16 (1), pp. 82-89.

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### **Abstract**

Aim: To evaluate the perspective, attitude, and readiness of orthodontic patients toward teleorthodontics. Materials and Methods: This prospective study was conducted at an orthodontic specialist clinic, Kulliyyah of Dentistry, Kuantan Pahang, Malaysia, involving all 46 orthodontic patients requiring active orthodontic treatment from February to July 2021. Patients were offered four options of online consultation: telephone call, virtual meeting, WhatsApp messaging, and a combination of all three methods. An online survey was distributed after the online consultations to assess patients' perspectives, attitudes, and readiness toward teleorthodontics. Descriptive statistics were used to summarize the demographic data. Mann-Whitney U test and Kruskal-Wallis test were used to compare the patient's perspectives, attitudes, and readiness toward teleorthodontics based on their demographic background. A Spearman's correlation coefficient looked at the linear relationship between the perspective, attitude, and readiness toward teleorthodontics practice. Results: About 82.4% agreed that teleorthodontics was convenient. About 82% agreed that teleorthodontics should be practiced during the pandemic and 72% agreed that it should be practiced after the pandemic. About 89.1% agreed that teleorthodontics bring benefits during the pandemic, and 74% agreed that teleorthodontics might bring benefits after the pandemic. No significant difference was found between sociodemographic background with the total scores of patients' perspectives, readiness, and attitude toward teleorthodontics. Conclusions: The majority of the patients showed good perspective, attitude, and readiness toward teleorthodontics. Teleorthodontics on certain clinical procedures can be implemented postpandemic to reduce in-office orthodontic visits. © 2024 Journal of International Oral Health.

#### **Author Keywords**

COVID-19; Orthodontics; Pandemic; Telemedicine

## References

- Zhu, N, Zhang, D, Wang, W, Li, X, Yang, B, Song, J
   A novel coronavirus from patients with pneumonia in China, 2019 (2020) N Engl J Med, 382, pp. 727-733.
   China Novel Coronavirus Investigating and Research Team
- Kumar, G, Rehman, F, Al-Muzian, L, Farsi, D, Hiremath, S Global scenario of teledentistry during COVID-19 pandemic: An insight (2021) Int. J Clin Pediatr Dent, 14, pp. 426-429.
- Malekshoar, M, Malekshoar, M, Javanshir, B.
   Challenges, limitations, and solutions for orthodontists during the coronavirus pandemic: A review
   (2021) Am J Orthod Dentofacial Orthop, 159, pp. e59-e71.
- Turkistani, KA
   Precautions and recommendations for orthodontic settings during the COVID-19 outbreak: A review
   (2020) Am J Orthod Dentofacial Orthop, 158, pp. 175-181.
- Abbas, B, Wajahat, M, Saleem, Z, Imran, E, Sajjad, M, Khurshid, Z
   Role of teledentistry in COVID-19 pandemic: A nationwide comparative analysis among dental professionals
   (2020) Eur J Dent, 14, pp. S116-S122.

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- Daniel, SJ, Wu, L, Kumar, S.
   Teledentistry: A systematic review of clinical outcomes, utilization and costs (2013) J Dent Hyg, 87, pp. 345-352.
- Estai, M, Kanagasingam, Y, Tennant, M, Bunt, S
   A systematic review of the research evidence for the benefits of teledentistry (2018) J Telemed Telecare, 24, pp. 147-156.
- Bhochhibhoya, A.
   Teledentistry: A novel tool in our arsenal to combat COVID-19 teledentistry (2020) Int Healthc Res J, 4, pp. 77-80.
- Telles-Araujo, GD, Caminha, RD, Kallás, MS, Santos, PS
   Teledentistry support in COVID-19 oral care
   (2020) Clinics, 75, p. e2030.
- Hansa, I, Semaan, SJ, Vaid, NR, Ferguson, DJ.
   Remote monitoring and "tele-orthodontics": Concept, scope and applications (2018) Semin Orthod, 24, pp. 470-481.
- Byrne, E, Watkinson, S.
   Patient and clinician satisfaction with video consultations during the COVID-19 pandemic: An opportunity for a new way of working
   (2021) J Orthod, 48, pp. 64-73.
- Saccomanno, S, Quinzi, V, Sarhan, S, Laganà, D, Marzo, G.
   Perspectives of tele-orthodontics in the COVID-19 emergency and as a future tool in daily practice
   (2020) Eur J Paediatr Dent, 21, pp. 157-162.
- Mariño, R, Ghanim, AT.
   A systematic review of the literature
   (2013) J Telemed Telecare, 19, pp. 179-183.
- Irving, M, Stewart, R, Spallek, H, Blinkhorn, A.

  Using teledentistry in clinical practice as an enabler to improve access to clinical care: A qualitative systematic review

  (2018) *J Telemed Telecare*, 24, pp. 129-146.
- Achmad, H, Tanumihardja, M, Ramadhany, YF.
   Teledentistry as a solution in dentistry during the COVID-19 pandemic period: A systematic review
   (2020) Int J Pharm Res, 12, pp. 272-278.
- Menhadji, P, Patel, R, Asimakopoulou, K, Quinn, B, Khoshkhounejad, G, Pasha, P
   Patients' and dentists' perceptions of tele-dentistry at the time of COVID-19: A
   questionnaire-based study
   (2021) J Dent, 113, p. 103782.
- Dalessandri, D, Sangalli, L, Tonni, I, Laffranchi, L, Bonetti, S, Visconti, L
   Attitude towards telemonitoring in orthodontists and orthodontic patients
   (2021) J Dent, 9, pp. 47-10.
- Bianco, A, Dalessandri, D, Oliva, B, Tonni, I, Isola, G, Visconti, L
   COVID-19 and orthodontics: An approach for monitoring patients at home (2021) Open Dent J, 15, pp. 87-96.
- Aboalshamat, KT, Althagafi, TK, Alsaeedi, SA, Alhumaidi, SN, Alemam, AA.
   Accuracy and perceptions of teledentistry in KSA during the COVID-19 pandemic: A single-centre randomised controlled trial
   (2022) J Taibah Univ Med Sci, 17, pp. 506-515.

- Olszewska, A, Rzymski, P.
   Children's dental anxiety during the COVID-19 pandemic: Polish experience (2020) J Clin Med, 9, p. 2751.
- Bustati, N, Rajeh, N.
   The impact of COVID-19 pandemic on patients receiving orthodontic treatment-An online questionnaire cross sectional study
   (2020) J World Fed Orthod, 9, pp. 159-163.
- Homsi, K, Ramachandran, V, Del Campo, DM, Del Campo, LM, Kusnoto, B, Atsawasuwan, P

The use of tele-orthodontics during the COVID-19 pandemic and beyond-Perspectives of patients and providers (2023) *BMC Oral Health*, 23, pp. 1-9.

- Hansa, I, Katyal, V, Ferguson, DJ, Vaid, N.
   Outcomes of clear aligner treatment with and without dental monitoring: A retrospective cohort study
   (2021) Am J Orthod Dentofacial Orthop, 159, pp. 453-459.
- Putrino, A, Caputo, M, Giovannoni, D, Barbato, E, Galluccio, G.
   Impact of the SARS-Cov2 pandemic on orthodontic therapies: An Italian experience of tele-orthodontics
   (2020) Pesqui Bras Odontopediatria Clín Integr, 20, p. e0100.
- Lipp, MJ, Riolo, C, Riolo, M, Farkas, J, Liu, T, Cisneros, GJ. Showing you care: An empathetic approach to doctor-patient communication (2016) Sem Orthod, 22, pp. 88-94.

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