World Academy of Science, Engineering and Technology International Journal of Biomedical and Biological Engineering Vol:15, No:12, 2021

The Use of Video Conferencing to Aid the Decision in Whether Vulnerable Patients Should Attend In-Person Appointments during a COVID Pandemic

Authors: Nadia Arikat, Katharine Blain

Abstract: During the worst of the COVID pandemic, only essential treatment was provided for patients needing urgent care. With the prolonged extent of the pandemic, there has been a return to more routine referrals for paediatric dentistry advice and treatment for specialist conditions. However, some of these patients and/or their carers may have significant medical issues meaning that attending in-person appointments carries additional risks. This poses an ethical dilemma for clinicians. This project looks at how a secure video conferencing platform ("Near Me") has been used to assess the need and urgency for in-person new patient visits, particularly for patients and families with additional risks. "Near Me" is a secure online video consulting service used by NHS Scotland. In deciding whether to bring a new patient to the hospital for an appointment, the clinical condition of the teeth together with the urgency for treatment need to be assessed. This is not always apparent from the referral letter. In addition, it is important to judge the risks to the patients and carers of such visits, particularly if they have medical issues. The use and effectiveness of "Near Me" consultations to help decide whether vulnerable paediatric patients should have in-person appointments will be illustrated and discussed using two families: one where the child is medically compromised (Alagille syndrome with previous liver transplant), and the other where there is a medically compromised parent (undergoing chemotherapy and a bone marrow transplant). In both cases, it was necessary to take into consideration the risks and moral implications of requesting that they attend the dental hospital during a pandemic. The option of remote consultation allowed further clinical information to be evaluated and the families take part in the decision-making process about whether and when such visits should be scheduled. These cases will demonstrate how medically compromised patients (or patients with vulnerable carers), could have their dental needs assessed in a socially distanced manner by video consultation. Together, the clinician and the patient's family can weigh up the risks, with regards to COVID-19, of attending for in-person appointments against the benefit of having treatment. This is particularly important for new paediatric patients who have not yet had a formal assessment. The limitations of this technology will also be discussed. It is limited by internet availability, the strength of the connection, the video quality and families owning a device which allows video calls. For those from a lower socio-economic background or living in some rural areas, this may not be possible or limit its usefulness. For the two patients discussed in this project, where the urgency of their dental condition was unclear, video consultation proved beneficial in deciding an appropriate outcome and preventing unnecessary exposure of vulnerable people to a hospital environment during a pandemic, demonstrating the usefulness of such technology when it is used appropriately.

Keywords: COVID-19, paediatrics, triage, video consultations

Conference Title: ICDEPD 2021: International Conference on Dental Ethics and Paediatric Dentistry

Conference Location : London, United Kingdom **Conference Dates :** December 09-10, 2021