

The risks of smartphone and mobile technology for the dissemination of clinical data by dental professionals

Précis

Technical support and digital professionalism training are required to facilitate the appropriate use of smartphone technology for dental clinicians practising in the Republic of Ireland.

Abstract

Statement of the problem: Smartphone technologies have changed the landscape of digital communication across society. The Covid-19 pandemic has accelerated the adoption of and requirement for technical solutions to facilitate remote clinical communications. Despite the benefits of smartphones in a clinical communication context, there are risks associated with their use.

Purpose of the study: The primary purpose of this study was to determine the extent of smartphone use among dental professionals in the Republic of Ireland (ROI). In addition, we sought to determine the perception and knowledge of potential pitfalls, risks, and limitations of these technologies among the same population. A smaller cohort of UK dental professionals was surveyed for comparison.

Materials and methods: An online quantitative survey was distributed to evaluate dental professionals' knowledge and understanding of the risks and limitations of smartphone and mobile technology, providing general understanding of the current use of smartphone technology in healthcare in the ROI and the UK.

Results: A total of 123 responses were received from dental professionals in the ROI (UK: n=77). The majority of dental professionals confirmed that they were aware of the risks associated with smartphone use and perceived that they were adequately skilled in digital professionalism. However, concerning practice regarding the communication of sensitive patient data was identified, with the potential for these data to be stored on insecure devices and cloud servers. Many ROI and UK dental professionals confirmed that they would need support to remove patient-identifying data when trading in their device.

Conclusions: App, smartphone and mobile device ownership among dental professionals for clinical communications is widespread in the ROI (and UK), with respondents using their devices to send images (photos and radiographs) to one another. However, the risks of such activities are only partly acknowledged, with many having a lack of insight into data security.

Journal of the Irish Dental Association June/July 2023; 69(3):149-153



Bernadette John
BSc (Hons) PG Dip RGN RM PHN
Cork University Dental School and
Hospital
University College Cork

Corresponding author: Bernadette John E: 118225957@umail.ucc.ie

Christine McCreary
MA MD FDS(OM)RCPS FFD RCSI
Senior Lecturer/Consultant in Oral
Medicine
Cork University Dental School and
Hospital
University College Cork

Anthony Roberts
BSc(Hons) BDS(Hons) PhD FDS
RCPS(Glasg) FDS(Rest Dent) FFD RCSI
FHEA
Professor/Consultant in Restorative
Dentistry
Cork University Dental School and Hospital
University College Cork