checking drug interactions or data collection are also well within the skillset of a dental professional.

Prior experience of research can be beneficial but is often not required. Good quality online training can be accessed by completing 'Good Clinical Practice' which is available through 'NIHR learn' along with other useful resources to get involved with research.

Within our trust the COVID-19 research delivery group is a multi-professional team of research nurses of various backgrounds, histopathologists, dentists, immunologists, and cardiologists to name a few. Experience ranges from junior trainee to consultant.

We implore clinicians not already employed on the frontline and considering redeployment, to contact their local research team and offer any assistance they feel able.

A. Jones, R. Moore, A. McKechnie, Leeds, UK

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Transitioning from dental school

Sir, current guidance from the GDC suggests that there will be no delay to the start of dental foundation training, typically beginning in September. However, what does this mean for finals students? Many last treated a patient in early March, and the next time they are likely to treat a patient is in September as a Dental Foundation Trainee (DFT), after almost seven months of clinical inactivity. All dental professionals returning to work after this current pandemic will feel such an effect but for those transitioning from dental school to DFT and learning about working in primary care for the first time this will be a very steep challenge.

Despite the challenging time the world and the dental profession faces, I have been very impressed by how we have adapted and continued to deliver education. This has allowed dental undergraduates to continue receiving lectures and case-based teaching through webinars. Many dental schools have also taken the decision to deliver finals exams in an online format, without any clinical patient-based examination.

Furthermore, there may need to be a difference in DFT teaching come September. This may involve potentially observing their educational supervisors for a few weeks and being given time to practise in clinical skills labs on phantom heads before actually proceeding to treat patients to help give confidence after months of clinical inactivity. DFTs will also potentially find themselves starting work at a time when the face of dentistry is changing. The clinicians supporting them may also be adapting themselves to the new environment and it is important that everyone is given the support to do this safely.

On reflection, this is a difficult time for everyone across the dental profession, and with finals looming in a format like never before, it is especially hard on current fifth year students. I would like to take this opportunity to wish all dental undergraduates the very best of luck for their forthcoming examinations.

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What will be viable for FDs?

Sir, along with my fellow FD colleagues this time has given me the chance to reflect and improve on my non-clinical skills at home, including the many webinars now available. After a time of reflection and growth I am eager to put my clinical skills to good use but wonder how practices will operate and when we will be able to carry out aerosol procedures.

I have always wanted to apply for a DCT position and I worry what will happen in the potential circumstance of me being successful, what tasks will I be able to perform? Emergency or routine care? Alternatively, if I do not achieve a DCT position for the upcoming rotation and look to find an associate position, will there be positions available? Or, will employers be less likely to employ due to the virus and the resultant lack of clinical practice I have obtained? As a dentist who has only recently graduated I worry that my clinical skills may have come to a standstill and with the prospect of UDA targets as an associate it may be a source of uncertainty and added pressure.

Despite the aforementioned I do believe that above my concern regarding future employment what matters most is staying safe during COVID-19 and I have great belief that as young dentists we will come through this period together with resilience and a new perspective on dentistry. To end with Socrates: 'the secret of change is to focus all of your energy, not on fighting the old, but on building the new'.

B. McConville, London, UK

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Orthodontic adjustments

Sir, orthodontic patients undergoing active treatment require regular monitoring with adjustments made to appliances over the course of treatment. The inability to do this during this time raises serious concern regarding the detrimental effects this may have on this group of patients' oral health, the provision of treatment and subsequent orthodontic patient management.

In the immediate to short term, patients may experience several orthodontic emergencies such as broken brackets, retainers, sharp wires and loose auxiliaries. These breakages may lead to discomfort, intra oral trauma and undesirable tooth movements including possible relapse in the case of a broken retainer. Following orthodontic triage, most emergencies are being managed with telephone advice and direction towards the British Orthodontic Society website which has excellent advice and video tutorials on home repairs.[1]

In the medium term there is concern with regards to the oral health of orthodontic patients currently in active treatment. Orthodontic treatment increases the patient's risk of developing decalcification, caries and gingivitis. However, with excellent oral hygiene and dietary control of sugar intake, these risks are reduced. Without regular reinforcement and review, patient motivation and compliance may be compromised with detrimental effects. For some patients it may be prudent to discontinue orthodontic treatment as a result.[2] Additionally, some patients may choose to terminate treatment due to the uncertainties surrounding COVID-19.

Anchorage is the resistance to unwanted tooth movement and is an important consideration in orthodontic treatment

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planning with respect to space requirements. There are several methods available to an orthodontist to alter the anchorage balance, for which the extraction pattern is one. Anchorage loss results from unwanted tooth movements.[3] It is possible that during this period unwanted tooth movement and space loss occurs which may compromise the final orthodontic result or lead to extended treatment times.

Without routine dental appointments taking place, general dental practitioners are not able to carry out orthodontic assessments and subsequently refer patients for orthodontic treatment. Timely orthodontic referrals are essential for the management of patients that require interceptive treatment, treatment with functional appliances and those with impacted teeth or pathology, eg root resorption.[4] It is also possible that during this time patients that may have been eligible for treatment on the NHS turn 18 years of age, which means they no longer qualify for treatment. It is essential that we are aware of these possible consequences and consider strategies to manage them when practice resumes.

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VR systems in dental education

Sir, we read with great interest the letter from B. Dunphy proposing replacement of conventional teaching aids during the coronavirus pandemic.[1] In various countries importance is being given to implementing the use of 3D virtual reality (VR) systems in health sciences. Here, a student utilises a digital system and VR glasses to monitor a patient and perform clinical examination procedures in a realistic virtual setting while being monitored by the teacher from a main cabin.[2] VR teaching gives students the advantage of learning through trial and error without physically harming a patient.

Alternatively, in some universities in Latin American and European countries, it is common to pair haptic simulators with VR systems in stomatology. This consists of the use of technological equipment that reliably imitates the sensation of touch that the operator may experience when in contact with real objects without coming into physical contact with them. In this way, haptic simulators are being applied in the field of endodontics, restorative dentistry and dental prostheses, among others.

We believe that it is important to implement such haptic simulators systems as an alternative in all dental faculties to enable students with the development of skills in the clinical field while complying with social distancing measures throughout the duration of the COVID-19 pandemic.

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Psychosomatic problems

Sir, the high transmissibility of the coronavirus and other contributing factors may cause psychological problems, including anxiety, depression, and stress. Patients who experience dental problems, especially such as acute pulpitis, oral haemorrhage, dental and maxillofacial trauma during the pandemic may also suffer tremendous psychosomatic problems.

Furthermore, isolation at home for a long period of time, suspension of dental services and high risk of dental treatment due to aerosolised respiratory secretions and close doctor-patient contact may exacerbate existing mental conditions and produce new oral psychosomatic disorders such as temporomandibular disorders (TMD), burning mouth syndrome (BMS), dental anxiety and other oral complaints.

Online psychological counselling services have been widely established in mainland China which provide free cognitive behavioural therapy (CBT) for depression, anxiety and insomnia for dental patients who suffer from psychosomatic problems. CBT has been proven effective for the treatment of psychiatric disorders, and has begun to be applied for psychosomatic problems in the dental patients. The prevalence of TMD in a community sample was almost 17.5% and the incidence even higher during the worldwide epidemic. Studies reported that CBT was more effective than no treatment.[1] Although CBTs were mainly conducted by psychologists, those conducted by trained dental hygienists were also found to be effective in reducing TMD pain and pain-related interference.

BMS is characterised by a burning sensation of the oral mucosa, with a prevalence of 3.7-.9% and is frequently associated with stressful life events, anxiety, and depressive disorders.[2] Various methods including psychological and pharmacological approaches have been applied for BMS with either long sessions of CBT or short duration of treatment improving the pain severity and discomfort of patients. Approximately 10–12% of the adult population suffer from dental anxiety.[3]

A significant reduction in subjective anxiety was achieved by patients with CBT when compared to those who received no treatment or anaesthesia/sedation. This study suggests more attention needs to be paid to patients with psychosomatic problems caused by acute dental pain and other urgent conditions; accessibility to online consulting service systems should be further strengthened and improved, particularly for confirmed cases who are in self-quarantine.

Ainiwaer Mijiti, Muhetaer Huojia, Shenzhen, China

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Redeployment DFT survey

Sir, we conducted a voluntary survey amongst DFTs to discover the factors that would influence their transition, their perceived needs, and their current skillset into redeployment. We received over 72

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