

parents showed signs of contentment upon the timely action. Henceforth, I strongly urge readers to instigate the creative artist in each one of us while dealing with child patients.

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Virucidal activity

Sir, I was disappointed to read the statement in an otherwise excellent document from the FGDP and College of General Dentistry that pre-treatment antiviral mouthwash was not recommended because of 'a lack of evidence of virucidal activity for use of pre-operative mouthwash'. I wonder if a flurry of recent papers, possibly overlooked, might lead to a questioning of that statement. What is now known is that SARS-CoV-2 replicates in the oral cavity and that extremely high numbers (>10 million) of infectious viral particles per ml saliva can be found at an early stage in SARS-CoV-2 infection.¹ The virus in saliva is not contamination from elsewhere, but reflects active replication probably in ACE2 positive epithelial cells in minor salivary glands.² Similar high levels are found in the nose.³

This is clearly an infection risk to any clinician working around the mouth or nose. Any virucidal agent applied to those sites may substantially reduce the risk of cross infection.⁴

Several commonly used antiseptic mouthwashes with anti-bacterial activity also have anti-viral activity against coronaviruses demonstrated *in vitro*.⁵ Two (povidone iodine and ethanol) have been shown to have substantial activity against SARS-CoV-2 and one (PVP-I) SARS-CoV in the presence of organic matter designed to replicate *in vivo* conditions.⁶ What is not known is how effective any anti-viral mouthwash actually is *in vivo*, nor how long the antiviral effect lasts. This has been estimated as greater than 20 minutes.⁴ Thus, does one recommend withholding a potentially effective agent (thus potentially exposing substantial numbers of dental HCWs to extra risk), or does one recommend that a simple, cheap, safe and potentially effective agent is used to help safeguard the profession while the extra information is sought?

PVP-I has been used in dentistry for over 60 years and its safety profile well

established.⁴ Over 24 dental HCWs have now died with SARS-CoV-2. Anything which helps to keep the profession as safe as possible is surely to be supported.

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Oncology patient support

Sir, each year there are approximately 12,200 new cases of head and neck cancer diagnosed in the UK.¹ For patients undergoing radiotherapy (either alone or in conjunction with resective surgery), the detrimental effects on oral health are well established, including the risk of developing osteoradionecrosis (ORN) of the jaws.

Preventative advice is paramount to reduce the need for future 'high risk' procedures including exodontia, which could initiate ORN. Clinical guidelines on the oral management of oncology patients recommend that adults are prescribed 5,000 ppm fluoride toothpaste and to rinse at least once daily with an alcohol free fluoride mouthrinse (0.05%). However in reality, this is not always the case. For oncology patients without a regular GDP, or those who may have intermittent treatment in a tertiary dental centre, accessing prescriptions for high fluoride products may be particularly challenging during COVID-19. Although fluoridated products could be prescribed by

patients' general medical practitioners (GMPs), funding restraints have resulted in NHS Clinical Commissioners advising against the routine prescription of high fluoride toothpaste in primary medical settings.²

We conducted a pilot survey investigating the awareness of ORN amongst GMPs and GMP trainees in the Midlands in 2019, the results demonstrating that this was very limited, but that there was a willingness to engage in teaching and education. The potential role for GMPs to support with preventative measures and vulnerable patients struggling to access routine dental care was identified. While dentists can continue support for these patients, future education and collaboration with our medical colleagues in primary care must also be considered in order to improve patient access, and ensure holistic patient care is being provided across all clinical settings.

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Test, test, test!

Sir, there are two reasons why the current guidelines pose an existential risk to dental practice:

- The additional costs involved plus the required fallow periods make general practice dentistry unsustainable
- The necessity to approach our patients while dressed like Darth Vader will raise perceived levels of fear and panic among them. Many will think that our practices are 'hot beds' of COVID-19 infection and they will simply stay away.

The policy as it stands (both in terms of national control and the dental protocols) will simply allow us to lurch falteringly to the inevitable second lockdown, due in the autumn or winter. The only way forward is to take charge of our own profession and use our own applied knowledge and skills. There

is a workable alternative approach and it relies on two fundamental factors:

- In dental practice the vast majority of dental patients are booked as 'elective' patients. We know who they are, we know when they are coming and we know what we are planning to do for them when they arrive. This means we can plan in advance of treatment and we can choose to delay treatment if necessary. Medical personnel in ICUs at hospitals have to be in close proximity to infectious patients – we do not have to be, nor should we be
- The only patients who present any form of risk from dental treatment (AGPs included) are those patients who are actively infectious at the time of treatment. Someone who has not been infected by the virus poses zero risk and someone who has been infected but recovered and seroconverted poses zero risk. Only a very small percentage of the population are infectious at any one time and these individuals are infectious only for a limited time.

The smart strategy means we need to identify the risk patients by advance swab testing of our patients when they require an appointment. Swab testing could be done onsite by a trained practice member in advance of any appointment booking. Those who test negative would be allowed normal full access to dental services. These appointments would be undertaken using exactly the same protocols as were used prior to the COVID-19 outbreak. Those who test positive will need to delay booking until they have a negative test – presumably about four weeks later if they remain well.

The main advantage of this approach is that it is proportional, specific and minimally disruptive. Furthermore, if the dental profession begins to test all of our patients this will have a significant advantage for the population as a whole, taking a burden away from the government or other healthcare sectors.

Therefore, we do not need to change dentistry fundamentally forever, we need to be SMART and TARGETED for now. If testing is done by the dental profession there will be spin-off benefits for all. To use the current 'management speak' it is a win/win situation.

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A new era for dental education

Sir, while going through a large pile of past copies of the *BDJ*, a front cover image is shown of a 'Face-mask for the protection of the dentist while operating' circa 1920, 100 years ago (Fig. 1).

It is important to reflect that we have always been an infection aware profession and have therefore often been at the forefront of infection control in the surgery for both our patients and the whole dental team.¹ Along with other dental schools,² we stopped student patient contact before lockdown, however, we have continued with online lectures, tutorials, one to ones and imaginative online remote assessment. We are now grappling with the expectation of teaching again in September. Naturally, much important education can occur for example, with group work on evidence-based dentistry and with teaching preclinical skills in skills laboratories. Indeed, some elements of education, such as case reports, clinical reasoning and team care planning are probably easier to timetable across year groups and inter-professionally in the virtual environment, than face to face.

As primarily a school teaching dental nurses to certificate level, separate degree programmes in dental therapy and in dental hygiene, as well as teaching final year students from King's College London integrated team care, our focus on minimal

intervention comes to the fore in a post COVID-19 era.

However, even behind our FFP3 masks and visors, the logistics of teaching clinical skills and caring for patients will remain a significant but critical challenge in our large open clinics with narrow passageways between clinical units. In addition, the need for one to one qualified dental nursing and new equipment that produces less aerosol, will not just need imagination, but like all of high street dentistry, considerable financial investment. We are about to enter a new era of dental education.

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Diagnosing OSCC via video

Sir, we would like to highlight a case of oral squamous cell carcinoma (OSCC) brought to our attention via digital and virtual communications methods. A 78-year-old male, in the midst of the recent pandemic lockdown, could not access an in-person consultation at his local GP surgery. His son was able to arrange tele-communications with the GP using a smartphone to take photos at the patient's home and email them to the GP who, after review, forwarded these via email to our Oral and Maxillofacial Surgery Department for assistance (Fig. 1).

On receiving the photos an immediate video consultation was set up between clinician, patient and family member using NHS Attend Anywhere to allow an initial history and assessment to be undertaken. It was suspected that the lesion was sinister and further higher quality photographs were requested and received reinforcing concern of an advanced lower lip SCC.

Urgent head and neck scans and biopsy investigations were organised for a one-time hospital visit, to reduce the number of in-person interactions for this shielded patient. By this stage a primary care assessment, secondary care referral, subsequent history and examination and planning of one-day further investigations



Fig. 1 The cover image of the *BDJ* Volume 227 issue 8, published on 25 October 2019