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their population while many more await theirs. However, a number of concerns have been raised over the side effects of some of the vaccines being given. Reports of blood clots following vaccination have resulted in eight countries suspending the Astra Zeneca vaccine over safety concerns. Many countries are treading with caution while some are delaying roll-out until these reports are fully clarified. While minimal side effects such as fatigue, headache, muscle aches, chills, joint pain, and possibly fever may be easier to handle, life threatening ones such as blood clots need to be properly investigated.

COVID-19 has opened up a vast area of research and colleagues are encouraged to do quality research in this area, as it affects their field. We encourage you to keep sending your manuscripts for review and subsequent publication in this vastly informative journal.

Prof. G. E. Erhabor
Editor-In-Chief

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A 3-Year Audit of Orthodontic Retention Protocol in a Nigerian Tertiary Health Institution

Orthodontic treatment outcome can be judged as successful when there is a long term post-treatment stability. Despite the use all treatment philosophies and appliance techniques, stability may not be guaranteed until the teeth are maintained in their orthodontically corrected positions following cessation of active treatment.[1,2] Retention of treatment results obtained after several months orthodontic treatment is one of the greatest challenges the orthodontist has to face apart from achieving their treatment objectives of correction of malocclusion. Relapse of orthodontic treatment is likely to take place within the first eight months of completion of treatment which is the time it takes for the gingival and periodontal ligaments to remodel. Relapse can also occur due to soft tissue pressures whenever the teeth are positioned in an unstable location.[2] In order to avoid relapse, there are generally two types of retention protocol viz: Removable and fixed appliances which are usually customized for each patient.

Removable retainers can be removed by the patient and they include: Hawley's bite plate and thermoplastic retainer (Essix and Sta-Vac) while fixed retainers are passive wires bonded to the lingual surfaces of a patient's teeth. CAD/CAM technique is now being used to fabricate a custom-cut NiTi retainer wire from a plain sheet of metal.

Previous studies[3,4] have shown that the preferred choice of retainer was the removable, clear thermoplastic/ vacuum-formed retainer. However, fixed retainers were mostly used in the Netherlands and Switzerland and vacuum-formed retainers were mostly used in the United Kingdom, Ireland and Malaysia. A combination of a fixed and removable retainers (vacuum-formed retainer) was the most used in Norway Majority of orthodontists prescribe that removable retainers be worn full-time for 6 months but the standard retention procedure is for 1–2 years. At present, longer periods of retention is being advocated, so much that some orthodontists now advocate a life-long retention. A study showed that maintenance of post-treatment orthodontic stability 1 and 10 years post-retention was only achieved in 60 and 38 per cent of cases respectively.[1]

Retention protocols vary from clinician to clinician and from country to country. Studies[3,4] have shown a general increase in the use of fixed retainers, however there was no consensus on the use of a particular approach.

In this 3-year audit of retention practices in a Nigerian tertiary institution, removable retainers were

mostly favoured, probably because of ease of fabrication and the cost. It is worthy of note that fixed retainers were sparingly used in the upper and lower arches. This may create a major challenge in maintaining de-rotated teeth, and this may subsequently result in late incisor crowding. One limitation of this study however, is the retrospective nature, which did not provide any information on the duration of retention and post-retention stability results.

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