

## KEY WORDS

Instagram, Instagram dentists, social media, ethical advertising, education

## LEARNING OBJECTIVES

- To increase awareness of the use of Instagram in dentistry, its benefits and the features which make it popular but also potentially quite dangerous
- To highlight the precautions needed when using Instagram in dentistry and to discuss related guidance on ethical advertising

## AUTHORS

**Hui Lynn Ooi BDS (Hons)**

Specialty Dentist, Acute Dental Care, King's College Hospital Dental Institute, London

**Martin G.D. Kelleher M.Sc., FDSRCS, FDSRCPs, FDSRCS**

Consultant in Restorative Dentistry, King's College Hospital, London

HUI LYNN OOI, MARTIN G.D. KELLEHER

Prim Dent J. 2021;10(1):13-19

# INSTAGRAM DENTISTRY

## ABSTRACT

Instagram, a photo and video social networking site, is gaining popularity in the dental world and it is easy to see why this is so. Instagram's potential to share information in an engaging way allows dental professionals to share clinical work and provides a unique way of learning.

Advertising on Instagram has blossomed. Some of this is for self-promotional reasons, for practice building, or for marketing of new techniques and products by manufacturers. One ought to be cautious about the implications of some patients' quest for 'dental perfection'. That is especially the case when destructive dentistry is being undertaken by dentists trying to replicate what they have seen on Instagram in potentially much more challenging patients. Some of those demanding patients request very ambitious treatments with sometimes hugely unrealistic expectations. Arguably, Instagram could be the new major trend in dentistry.

## Introduction

The rise of social media in dentistry has paved the way for a new phrase in the dental world – Instagram Dentistry. Instagram (IG or Insta) is a photo and video sharing networking service, launched in October 2010 and now owned by Facebook.

The total number of active monthly Instagram users worldwide reached one billion in 2020, with over two-thirds of them below the age of 34.<sup>1</sup> Instagram is fast increasing in popularity among 12 to 34-year-olds and in that category, it has surpassed Facebook's market share by 66% to 62% in the US population in 2019.<sup>2</sup>

Instagram's methods of engaging users with its images make it popular in dentistry, which is arguably a very visually demanding field. Instagram has changed the way dentistry is advertised, portrayed to the public, and is being used amongst a whole new generation of dentists and potential patients. Love it or hate it, a wave of 'Insta Dentists' has arrived.

## The 101 of Instagram

Instagram is an allegedly 'free' photo and video sharing platform which is popular for its mobile compatibility and ease of use, with its effortless, almost 'check your brain in at the door' feel-good feeling caused by addictive scrolling.

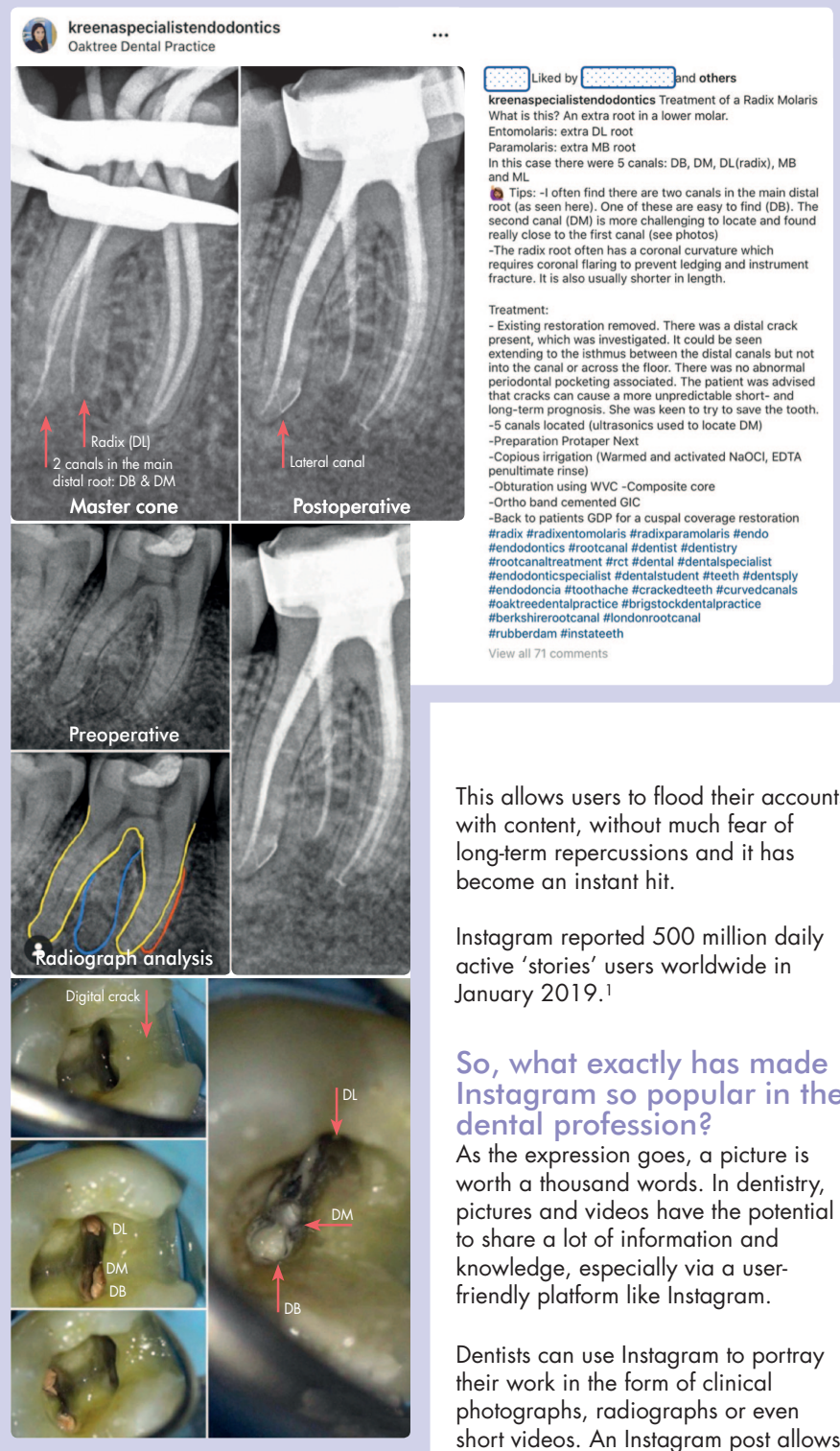
While Instagram can be viewed on your computer webpage, it was designed primarily for smartphone use with its easy, palm of your hand access.

An Instagram account can either be private or public. As the name suggests, public accounts can be viewed by anybody, whereas private accounts can only be viewed by approved 'friends'. This means that a dentist posting pictures or videos with dentally related content on a public account can have it viewed by anyone – be that by existing patients, dental colleagues or prospective 'clients'.

Instagram's news feed consists of either photos or short videos that are up to 60 seconds long.

FIGURE 1

Images courtesy of @kreenaspecialistendodontics



This allows users to flood their accounts with content, without much fear of long-term repercussions and it has become an instant hit.

Instagram reported 500 million daily active 'stories' users worldwide in January 2019.<sup>1</sup>

### So, what exactly has made Instagram so popular in the dental profession?

As the expression goes, a picture is worth a thousand words. In dentistry, pictures and videos have the potential to share a lot of information and knowledge, especially via a user-friendly platform like Instagram.

Dentists can use Instagram to portray their work in the form of clinical photographs, radiographs or even short videos. An Instagram post allows viewers to slide quickly between pictures which can make a great compilation of step-by-step procedures, such as caries removal through to the final restoration. It can quickly illustrate different stages of treatment at various time intervals, such as in orthodontic

cases, and demonstrate before and after treatment pictures. It can also be used in endodontics to show the pre-treatment problems, images during endodontic procedures or post-operative radiographs as effectively shown in Figure 1.

Also, 60 second videos allow viewers to watch procedures, with some of the most popular ones being anterior Class IV composite restorations. Not only are dentists able to showcase their skills, but they can also share the various clinical tips and techniques used in order to allow other dentists to experiment with those methods and hopefully improve clinical outcomes for patients.

For example, in creating an interproximal contour of anterior composite restorations, someone who has trained with clear plastic Mylar strips might be interested in using a posterior metal sectional matrix or PTFE tape after watching a video demonstrating that technique.

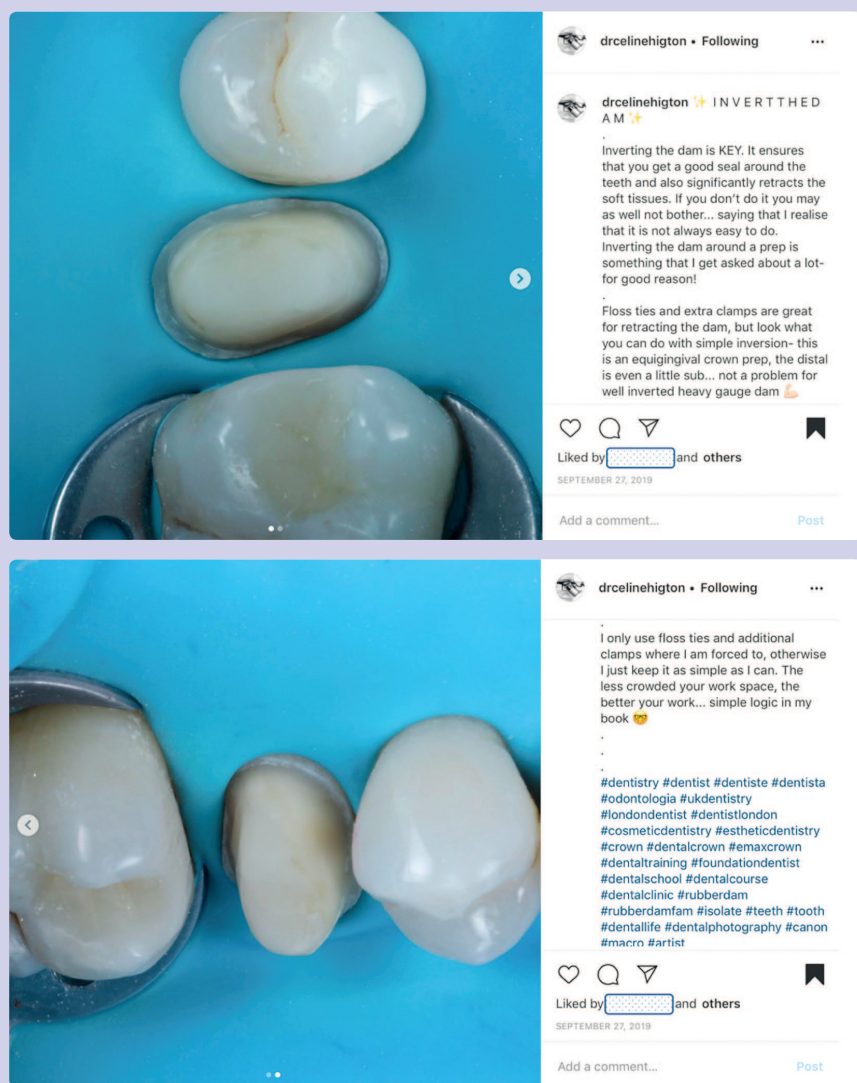
Dentists with different approaches and training from various parts of the world are able to share their commonly taught and tried techniques. This a great way for younger dentists to be exposed to different approaches while they are still trying to establish a protocol for procedures that work well for them. It has the potential to bring dental communities together from around the world and possibly help to bridge various generations of dentists.

Instagram's 'educational content' offering continues to grow with dedicated dentistry accounts such as 'dentistry.world', 'dentistry forum' and 'about\_dentistry', which separately, boast between 300,000 and 500,000 followers. Some of these accounts post entertaining, humorous dental content as well as encouraging dentists to send in work to be shared on the page. This incentivises the generation of new, engaging content from dentists around the world, keeping followers entertained while giving credit to the respective dentists, which in turn can help increase online traffic to their individual Instagram accounts.

Some dentists are turning to their Instagram feeds to discuss topics or deliver clinical pointers. The use of

Instagram 'stories', a feature that started in August 2016, allows photos and 15-second videos to be uploaded, which disappear after 24 hours.

FIGURE 2



Instagram 'live' which allows watching a procedure in real time, or even just live 'Question and Answer' sessions, have become increasingly popular.

A plethora of topics can be discussed this way, such as rubber dam placement tips and tricks as shown in Figure 2 which has become an increasingly popular topic. Others demonstrate ways of choosing the right sectional matrix system or give their opinion on the best composite polishing protocols.

Instagram stories, which disappear after 24 hours, also allows dentists to engage in some quick fire questions via the Instagram messaging system which, in theory at least, is private between

any dentist and the original uploader of the content. A person could ask their followers to reply with their best endodontic case and they could then share the replies of each person's work in their stories.

Apart from dental procedures, an increasing number of anatomy related Instagram education accounts have emerged for both medical and dental students.<sup>3</sup> This helps to close the gap between dry theory and effective clinical education.

Instagram provides a unique and arguably exciting way of learning, while many might just enjoy it as a form of entertainment, as a way of checking

in to see what friends, colleagues and relatives are up to, and occasionally, some interesting dentistry might catch the eye. So, for the general dentist with a personal Instagram account, browsing dental content could be a great way to see techniques that are not routinely done in practice, or to get inspiration for the work ahead, as depicted in the posts that comprise Figure 3.

### Instagram advertising

When posting on Instagram or any social media, it is all about the image someone wishes to portray, or the story they want to tell the world. Be it one's own image, a brand, a technique or a product, one can control what other people using Instagram will see. There is a natural tendency to present one's best aspects, which fuels the debates about image and social media.

Dentists who choose to portray their work, be it in photo or video format, are able to use Instagram as their online portfolio. Gone are the days when you kept your portfolio in a folder tucked away. Now, the best of your work is readily visible to your colleagues, friends, family and the general public. This is arguably self-promotion at its best – or at its worst. However, caution is advised because is it really that surprising that dentists choose to paint themselves in the best possible light and only post their successful and best work which might not represent their average result? Many dentists are guilty of a little 'humble bragging' and having one's work on Instagram definitely gives one that opportunity.

It is very easy to imply to any potential new patient that very good outcomes are routine when, in fact, they are not. Easy cases can look great but more challenging cases will not be so easy or predictable in much more difficult patients.

Photos of beautiful clinical work allow one to advertise one's expertise to potential patients, prospective employers or even to draw a little envy from one's colleagues. In many cases, however, the real credit should go to the dental technician rather than to the clinician, especially when indirect work is involved.

Some dentists use Instagram primarily to promote the practice they work at, and



FIGURE 3



thereby hope to generate an increased patient base.

Instagram is now expanding its online profile by advocating their model for building businesses through advertising with them for a fee. Its business appeal rests on having a large, highly engaged audience. This allows enterprises to use Instagram to advertise in order attract 'customers' in a cost-effective manner.

Users can now advertise via stories and posts and they can customise their targeted audience based on location, interests, demographics, behaviours and even 'lookalike audiences'.<sup>4</sup> Businesses can then track the number, as well as the demographics, of the people that have seen the frequent use and interacted with the post that is being promoted.

However, use of Instagram means that data is being collected ruthlessly and sold on for targeted advertising, sometimes to dubious dental companies or to 'dental gurus', some of whom have bizarre ideas. Not everyone seems fully aware that, in effect, they are being

spied on for someone else's commercial gain.

A study by Synman and Visser found that a large majority of dentists in South Africa, 83.5%, felt that the use of social media for dentistry marketing would only increase in the future.<sup>5</sup> Haas and Park showed in their survey of members of the American Association of Orthodontists that 55% of them were already using some form of social media network to market their practice and also that 95% of those surveyed felt social media advertising would be inevitable. Non-users, who were nevertheless eager to use social media for marketing purposes, have cited privacy concerns and lack of knowledge as potential problems.<sup>6</sup>

### Taking everything with a 'pinch of salt'

Drawbacks are inevitable, and the same applies to the boom of Instagram in dentistry. Clinical work posted online might be able to raise the standard of dentistry.

Good work can serve as a source of inspiration, or even help to set goals that many young dentists can strive to achieve. Conversely, the Instagram posts can have a negative impact on the mindset of many dentists who might feel that their own clinical work does not reach the level of what is seen on Instagram. That could lead to an unhealthy amount of mutual professional comparison and perhaps even an unrealistic striving for 'cosmetic perfection'.

Graphic pictures of the actual destruction of sound teeth are rarely, if ever, included in many heavily censored posts. Consequently, they do not give a full and frank picture to potential patients of what is actually going to be done to their natural teeth to achieve those final outcomes, which may well be short-lived. Many outcomes are produced at the expense of long-term pulpal health and coronal tooth strength and structure by damage being done to many mainly sound teeth to achieve those superficially attractive outcomes.<sup>7</sup>

The actual clinical conditions under which the cases were treated often get overlooked. A lot of the clinical work chosen to be posted is often undertaken electively and privately with minimal time pressures and using some of the best materials, instrumentation and skilled dental technicians available.

Other dentists providing care on the NHS, who are often pushed for time and with limited resources, cannot offer a direct and fair comparison. This unfair comparison can cause many young dentists to become disheartened, with implications on their clinical confidence. Furthermore, not every case makes it to Instagram and inevitably the cases that get chosen to be posted are the ones with better outcomes. Just as in life, people post the more appealing photos of themselves, or emphasise their best moments, but quietly hide the bad parts from others.

Considerable caution needs to be exercised in believing what is posted. The amount of editing of photographs with filters and software is an unknown variable because such tools are readily

available and easy to use. Arguably, some of the content uploaded online by less-ethical dentists might be heavily edited or 'doctored' and thus, can easily result in unrealistic expectations of 'dental perfection'. Even worse, some practitioners may manipulate images to mask unsatisfactory treatments.

Hence, an ethical obligation to post unedited photos of clinical work is needed to maintain trust in the profession. Although one would hope that all dentists are honest about their work, there is also the possibility for people to steal images of work seen on Instagram and pass it off as their own. An electronic image can be easily obtained, altered and shared without the author's knowledge.<sup>8</sup>

### Variations in dental philosophies in different cultures

One important point to note is that there are very different styles of dentistry practised around the world. Instagram facilitates the sharing of these and provides exposure to techniques, philosophies and ideas from other countries.

It's worth noting that some countries tend to favour a destructive/invasive style of dentistry, for example, with multiple ceramic veneers being the common go-to treatment for improving smile aesthetics quickly. Some posts even show the provision of ceramic veneers on unrestored virgin teeth to improve the colour and shape of the teeth. This type of unnecessary destruction would be criticised quite harshly by some more conservative UK dentists.

Many UK dental institutions teach dentists to practise minimally destructive dentistry and often advocate align/bleach/bond approaches to preserve sound tooth structure for the benefit of patients in the long term. However, the use of extensive, almost three-quarter crown style preparations for 'ceramic veneers' can be common practice in some other countries. This too can create an unrealistic and dangerous expectation among patients who may

want similar treatments, or among other dentists who may well be influenced into thinking this is an acceptable, or indeed preferable, form of treatment.<sup>9</sup>

### Ethical advertising and pitfalls

Social media has blurred the boundaries between professional and personal life, and it is easy for one to negatively impact the other. It is prudent to keep these as separate as possible and to establish a separate professional Instagram account from one's personal account.

The first General Dental Council (GDC) advice on using social media was published in 2013 and was updated in 2016.<sup>10</sup> The guidance focuses on maintaining patient confidentiality. Content posted must not be identifiable to patients or others unless the patient's explicit consent has been granted. Certainly, with the increasing use of social media today, it would be prudent for clinicians to include in the consent form explicit permission for use of patients' clinical photographs on social media.

That could complement the requirement for detailed consent discussions to be documented carefully in the records to include 'Montgomery consent' about 'material risks' – giving explicit permission for publications and teaching purposes as well as for advertising.

The GDC also mentions the professional responsibilities in maintaining appropriate boundaries with patients, and maintaining public trust in the dental profession.

GDC guidance on online advertising is somewhat limited to websites and does not really cover social media platforms such as Instagram, Facebook or Twitter.<sup>11</sup>

In addition, there have been disciplinary actions by the GDC related to social media use. This strongly suggests an urgent need for social media awareness training for all members of the dental team. This training needs to be part of early education during the dental

professional's training and should be continued during continued professional development (CPD) extending across the whole dental team.<sup>12</sup>

Dangers may well arise with advertising on Instagram where manufacturers are making ambitious and often unsubstantiated claims about products. One only needs to input 'teeth whitening' in the search box to find a plethora of products being recommended by 'brand ambassadors' promising instantly whiter teeth which can be easily purchased online. It is important to note that these 'brand ambassadors' – individuals with a high social media following – generally receive income from promoting products on their Instagram accounts. Unsubstantiated, financially driven claims for products or dental techniques can be dangerous to the general public due to the potential for dissemination of disinformation and information.<sup>13</sup>

There is very little quality control with content posted online compared to much of the information published in journals which undergo a strict peer-review process.<sup>14</sup>

Ethical marketing in healthcare is complex, difficult and dangerous. The complexity lies in the range of problems present in dentistry; difficult, in appeasing patients who hold unrealistic expectations; dangerous, when opinions are plentiful and verifiable facts are rare.<sup>15</sup> Things have been made more complicated by Instagram and other data gathering applications which can then target susceptible or gullible people in persistent and yet subtle ways. Not all dental treatments seen on Instagram ought to be 'sold' to every patient. Serious ethical and consent issues can arise when a patient demands an inappropriately destructive treatment that they have seen on Instagram.

Proper marketing should be patient-focussed, ensuring that a particular treatment is appropriate for that patient at that time and that the other available realistic options are discussed in a neutral and balanced way.

The potential to 'over-promise and under-deliver' is a major source

of litigation if the patient or their partner/parent is in any way dissatisfied with the outcome – regardless of how unrealistic their expectations might be.

By showcasing only their best work, dentists, perhaps unintentionally, raise the expectations of some patients to unrealistic levels. Consequently, anything less than an excellent outcome, as subjectively judged by them, can result in disappointment or lead to a complaint. After all, it may well have been those very images advertised that convinced a patient to choose that particular dentist over another.

Dentists need to be modest in what they promise and remain acutely aware that nearly 50% of patients showing up for plastic surgery have a recognisable psychiatric disorder, as described in a classic paper by Napoleon in 1993.<sup>16</sup> In addition, patients with body dysmorphic syndrome seeking cosmetic dental treatment are often dissatisfied with any procedure provided and therefore deem the treatment and that dentist a failure.<sup>17</sup> If their expectations are in any way unrealistic, that needs to be challenged and addressed at an early stage.

A visual analogue scale can be used to get an insight into the patient's aspirations or expectations as part of the initial assessment before undertaking any elective cosmetic dental procedure. Figure 4 depicts an example of a patient's completed visual analogue scale (VAS) that clearly highlights serious concerns. As can be seen from this visual analogue scale, the patient is hoping to achieve a superb appearance, longevity, and preservation of tooth structure with little dental destruction but has virtually no real concerns about the risk level of the procedures.<sup>15</sup>

In providing cosmetic dentistry, the risk of an implied contract between patient and dentist remains high. If a patient felt that by receiving extensive dentistry from that particular dentist based on

the dentist's Instagram posts, that they would automatically end up with the 'perfect smile', then the implied contract was to deliver that outcome. If the patient subsequently feels that they did not get their subjectively perceived 'perfect smile', then there could be a tort on that implied contract.

Specialist lawyers may well run the case on a 'no win no fee' agreement for the patient. Patients frequently allege "not understanding that there was a danger of a less than perfect outcome" when they signed the documents, despite extensive discussions.

Patients' records are vital in such cases, documenting clear references to a sensible consent process. A diagnosis of the cosmetic problem must be present, and pre-operative photographs and study models and radiographs are always helpful. Photographs of a direct composite mock-up done on the patient's teeth before undertaking treatment can also demonstrate what was actually promised, as opposed to a laboratory wax-up, which might not be feasible in practice.

A detailed record of consent, explaining any reasonable options, ought to be subjected to a BRAN test—benefits, risks and (doing) nothing, taking into account the Montgomery ruling on consent, which relates to a patient's understanding of any material risks.

An option would also involve referral to a specialist dentist and, if this offer is declined by the patient, clear documented evidence of this is prudent.

Claims on the longevity of restorations provided should also be quoted from a dentist's own audited figures, and not those from some highly experienced specialists. This is needed to provide a clearer and honest picture for the protection of patients and for maintaining the reputation of the dental profession.

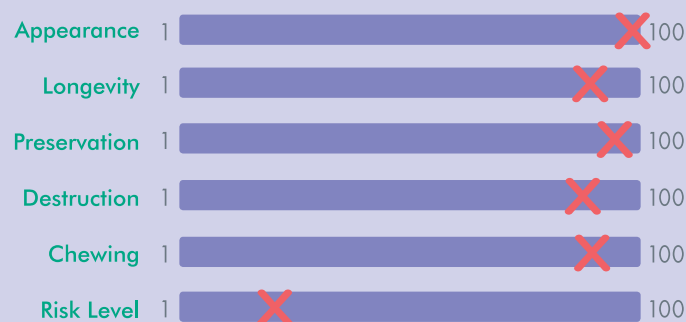
Dentists need to be self-critical and to take into consideration the variability of outcomes in clinical dentistry and the difficulty in reproducing work precisely every single time, particularly in very challenging patients with very complex problems.<sup>18</sup>

## Conclusion

The ethical and diligent use of Instagram has the potential to contribute greatly to the world of dentistry by serving as a source of education and improving clinical outcomes for patients. Instagram used for advertising can yield decent returns but precautions need to be taken to always act in a way that is ethical, sensible and appropriate and thereby protect patients and reflect well on the dental profession.

**FIGURE 4**

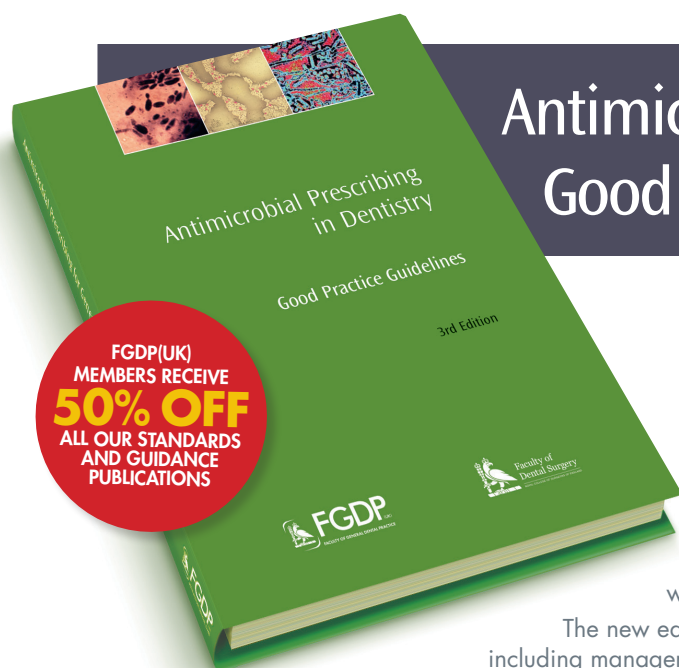
### SIMPLE PATIENT VISUAL ANALOGUE SCALE



Source: data from Kelleher et al. (2012)<sup>15</sup>

## REFERENCES

- 1 Instagram Business. Instagram for Business. [Internet]. London: Facebook; 2010. Available at [https://business.instagram.com/?locale=en\\_GB](https://business.instagram.com/?locale=en_GB).
- 2 Beniamini N. The Infinite Dial. [Internet]. New York: Edison Research; 2019. Available at <https://www.edisonresearch.com/infinite-dial-2019/>.
- 3 Douglas NKM, Scholz M, Myers AM, et al. Reviewing the Role of Instagram in Education: Can a Photo Sharing Application Deliver Benefits to Medical and Dental Anatomy Education? Med Sc Ed. 2019;29:1117-1128.
- 4 Advertising on Instagram. Instagram for Business. [Internet]. London: Facebook; 2010. Available at [https://business.instagram.com/?locale=en\\_GB](https://business.instagram.com/?locale=en_GB).
- 5 Snyman L, Visser JH. The adoption of social media and social media marketing by dentists in South Africa. S Afr Dent J. 2014 July;69(6):258,260-4.
- 6 Haas J, Park JH. Management & marketing: orthodontic marketing through online social networks. J Clin Orthod. 2012 Mar;46(3):159-64.
- 7 Edelhoff D, Sorensen J. Tooth structure removal associated with various preparation designs for anterior teeth. Prosthet Dent. 2002 May;87(5):503-9.
- 8 Tsang A, Sweet D, Wood RE. Potential for fraudulent use of digital radiography. Endod 1999;25(4):275-276.
- 9 Rana S, Kelleher M. The Dangers of Social Media and Young Dental Patients' Body Image. Dent Update 2018;45:902-910.
- 10 General Dental Council (GDC). Guidance on using social media. [Internet]. London;GDC;2016. Available at [https://www.gdc-uk.org/docs/default-source/guidance-documents/guidance-on-advertising.pdf?sfvrsn=a5540520\\_2](https://www.gdc-uk.org/docs/default-source/guidance-documents/guidance-on-advertising.pdf?sfvrsn=a5540520_2) [Accessed 18/04/2020].
- 11 General Dental Council (GDC). Guidance on advertising. [Internet]. London;GDC;2013. Available at [https://www.gdc-uk.org/docs/default-source/guidance-documents/guidance-on-advertising.pdf?sfvrsn=a5540520\\_2](https://www.gdc-uk.org/docs/default-source/guidance-documents/guidance-on-advertising.pdf?sfvrsn=a5540520_2) [Accessed 18/04/2020].
- 12 Spallek H, Turner SP, Donate-Barfield E, et al. Social media in the dental school environment, part A: benefits, challenges, and recommendations for use. J Dent Educ. 2015 Oct;79(10):1140-52.
- 13 Sykes LM, Harryparsad A, Evans WG, et al. Social Media and Dentistry: Part 8: Ethical, legal, and professional concerns with the use of internet sites by health care professionals. S Afr Dent J. 2017;72(3):132-136.
- 14 Hamm MP, Chisholm A, Shulhan J, et al. Social media use by health care professionals and trainees: a scoping review. Acad Med. 2013 Sep;88(9):1376-83.
- 15 Kelleher MG, Djemal S, Lewis N. Ethical marketing in 'aesthetic' ('esthetic') or 'cosmetic dentistry' part 1. Dent Update. 2012 Jun;39(5):313-6.
- 16 Napoleon A. The presentation of personalities in plastic surgery. An Plast Surg. 1993;31(3):193-208.
- 17 Scott SE, Newton JT. Body dysmorphic disorder and aesthetic dentistry. Dent update. 2012;38:112-118.
- 18 Kelleher MGD, Djemal S, Lewis N. Ethical marketing in 'aesthetic' ('esthetic') or 'cosmetic dentistry' part 3. Dent Update. 2012;39:472-486.



## Antimicrobial Prescribing in Dentistry: Good Practice Guidelines

 **AVAILABLE NOW  
IN PRINT & ONLINE**

FGDP(UK) and FDS' new guidance on antimicrobial prescribing helps dental professionals fulfil their statutory duty to ensure appropriate use of antibiotics. It gives clear and practical advice on when to prescribe, what to prescribe, for how long and at what dosage.

The new edition updates the 2012 version and widens the scope to all of dentistry, including management of oral and dental infections by specialists and trainees in hospital environments. It also covers prescribing to both adults and children, and was created in response to the increasing development of antimicrobial resistance worldwide.



WWW.FGDP.ORG.UK



AVAILABLE IN PRINT: **£19.99** TO FGDP(UK) MEMBERS. **£39.99** TO NON-MEMBERS  
FREE OF CHARGE ONLINE AT FGDP.ORG.UK