Misleading advertising – What is our duty as dental professionals towards our patients and the public?

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ABSTRACT
There are currently several media adverts on radio and television in which “experts” confidently inform the public of their unique kinds of toothpaste which not only strengthen but can rebuild enamel and lost tooth substance. The concerns raised in this paper relate to pharmaceutical companies preying on uninformed, concerned, and often-compromised consumers to promote their products. To this end, some make fallacious claims, misrepresent or overinflate their products’ therapeutic potential, which all overtly or covertly create false hopes and unrealistic expectations. The profession needs to collectively identify a body that will monitor the information presented to the public by dental manufacturers, advertising bodies, and social media websites. If we stand by and say nothing, we agree with the data and legitimize the product. Dental clinicians need to be more accountable, active, and visible on television, social media sites and in popular publications providing educational information and, if necessary, dispelling false perceptions. We have a duty to the public.

Introduction
A 10-year-old patient presented to our clinic complaining of severe tooth sensitivity, poor aesthetics, and badly broken-down teeth. Her father reported that his daughter was becoming increasingly self-conscious about her smile and had been constantly teased at school. He added that she always had “weak” teeth that were treated with extraction. Without a clinical examination, this would suggest that the child had suffered from poor oral hygiene and dental decay. Intraoral examination revealed severely broken down teeth, missing teeth, and teeth that were stained yellow, but the patient’s oral hygiene was excellent. The father confirmed that his daughter was meticulous about brushing her teeth at least three times a day and that they had purchased “special toothpaste” purported to “rebuild lost enamel.” To his surprise, he confessed that the toothpaste had not rebuilt the enamel no matter how often it was used. Further clinical assessment, history taking, and radiographic investigations led to a diagnosis of Amelogenesis Imperfecta type III according to the Witkop and Rao (1971) classification. The parents were visibly upset when the condition was explained to them, especially when they were told that no amount of brushing or toothpaste could restore lost tooth structure; it had done quite the opposite and accelerated the loss of enamel from her already compromised teeth.

The issues of concern
The above case scenario was a stark reminder of how we as a profession have been failing our patients by our inactivity. At the time of writing this paper, there are currently several media adverts on radio and television in which “experts” confidently inform the public of their unique kinds of toothpaste which not only strengthen but can rebuild enamel and lost tooth substance. They substantiate their claims by adding that 9 out of 10 dentists recommend their product. A Google search for remineralizing toothpaste revealed countless dental toothpaste products, all loaded with advertorial hype, written using emotive language and promising to deliver life-changing benefits. Most sites have a leading (Misleading?) heading in bold print, which is all consumers generally read and remember. The more carefully constructed text follows this heading in small print. The latter is often cleverly worded to suggest many benefits but uses terms that still leave room for plausible deniability if challenged. The following examples were taken directly taken from various websites:


"Pro Duct X is clinically proven to rebuild enamel strength, protecting against the effects of everyday acids”. Acid erosion can threaten the long-term health of your teeth, so it’s important to know how to protect your teeth from its irreversible effects. Pro Duct X toothpaste is a key ingredient in that line of defence and preservation—it helps protect your tooth enamel from further damage. It is specially designed to help re-harden precious, acid-

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softened tooth enamel. With a low-abrasive, pH neutral formulation. Pro Duct X toothpaste helps protect your enamel while you brush your teeth. Are You Protecting Your Enamel?”

Notice how the title states that it is proven to rebuild enamel. The unsuspecting consumer will interpret this to mean that it can restore lost enamel. If they read further, they may be forgiven for believing that the “healing” will be even better and faster the more they use it, as it states, “helps protect your enamel while you brush your teeth.” The clever addition of the word “strength” to the title covers the manufacturer against the erroneous assumption that it can rebuild actual tooth enamel.

Some sites are more cautious in their adverts but still suggest that more frequent brushing will lead to better results. They often also add the promise of tooth whitening, which they know will appeal to the aesthetically conscious public. “Brushing regularly with a remineralizing toothpaste such as Pro Duct X is one of the best methods of strengthening tooth enamel. Every time you brush your teeth with fluoride toothpaste, your tooth enamel absorbs a small amount of fluoride, which replaces the minerals that have been lost. Over time, the existing enamel becomes stronger and more resistant to decay”

Suppose one does read until the very end of the long small print section. In that case, you will find a line that the advertisers can use in their defence as they mention, “And remember, remineralizing toothpaste doesn’t treat cavities. But it sure does help prevent them”.

What about those companies who “use” us professionals without our consent? A famous television advert states, “Nine out of ten dentists recommend……..”. We all know hundreds of dentists; how many of you or your colleagues have ever been interviewed? Furthermore, who were the dentists, they asked? How many did they include in their sample? Who conducted the survey? How many of them had access to the laboratory or clinical evidence to enable them to recommend the product? On what grounds did the dentists base their recommendations? Perhaps the advert would be more accurate if it stated, “None out of ten dentists preferentially recommend……..” and also elaborate why the ONE did not.

There can be no doubt that adverts work in both promoting and creating a public demand for specific products. A few more minutes of web scrolling for toothpaste revealed 28 products on just one site. It is interesting to note, the wording used to describe each of the listed ingredients and the vastly differing prices (these ranged from R56.99 to R549.00 per tube - the current rate for a regular toothpaste is R22.99 and for the Big Mac index is R 54.99). They all have similar descriptors, but each adds its unique ingredient or engaging name, such as:

- Charcoal toothpaste
- Hydroxyapatite containing, Non-foam toothpaste
- Remineralizing paste with crystal toothbrush
- Remineralizing toothpaste with whitening charcoal
- Superwhite toothpaste

This extensive list even includes remineralizing and tooth whitening tablets, which are advertised as “Remineralizing toothpaste tablets with high gloss teeth, whitening.” These cost an exorbitant R658.00 for 62 tablets. A different search for children’s toothpaste showed an equally high number of products marketed with labels such as “homeopathic,” “fizzy bubble gum flavored,” “designed by dental experts,” and “fun, fresh, and healthy.” It is concerning that there are also “tooth whitening” pastes for children, as well as a number that are “specially formulated and fluoride free for children.” Once again, the costs vary widely, with some “exclusive” brands having highly inflated price tags.

Ethical concerns and considerations

The concerns raised in this paper relate to pharmaceutical companies preying on uninformed, concerned, and often-compromised consumers to promote their products. To this end, some make fallacious claims, misrepresent or overinflate their products’ therapeutic potential, which all overtly or covertly create false hopes and unrealistic expectations. This may result in patients wasting time and money on products or treatment regimes that do not fulfill all promises or provide the desired benefits. Worse still is that some may even cause harm to unwitting patients if incorrectly used. How do manufacturers get away with this? They rely on the fact that most consumers accept and believe what they see, hear, and read without question. In addition, Multipharma companies are often huge, well-established, recognized, trusted, rich, and influential. They can afford widespread and flamboyant adverts and lawyers to defend them against anyone who may challenge their claims. However, we cannot blame the unsuspecting public or the competitive commercial industry for the current situation.

The fundamental ethical concern lies with the dental profession. For too long, clinicians have sat back and watched the market explosion yet have never individually or collectively voiced any concerns. Many even condone the process by preferentially promoting specific products in the form of free samples that they display in their waiting rooms and hand out to patients. What a clever and cheap advertising strategy for the representatives who supply these! These samples may also be accompanied by “kickbacks” in exchange for a guarantee that the clinician will encourage their use amongst patients and/or purchase other materials and
equipment from that same company. Some more sinister perks are disguised as gifts, free lunches, entries into “lucky draws,” free registration at CPD events, and even luxurious holidays. Once a person has been “bought,” it becomes tough for them to challenge the purse-holder. It is easier to turn a blind eye to misleading adverts or unproven claims, but in doing so, their inactivity equates to acceptance and consent. Are we, as educated professionals, easily bribed and bought? One would like to believe that the current silence amongst dentists reflects an attitude of apathy rather than moral dearth/decline. In either case, do we need to seek and implement measures to rectify the problem?

**Dentists’ moral and ethical duties and obligations**

The profession needs to collectively identify a body that will monitor the information presented to the public by dental manufacturers, advertising bodies, and social media websites. If we stand by and say nothing, we agree with the data and legitimize the product. But who amongst the fraternity is questioning the validity of research that accompanies promotional campaigns? Company-sponsored research needs to be even more vigilantly monitored as it has a much higher potential for conflict of interest on the part of the researchers. Why are dental academics who publish research on new materials not taking legal action against false advertising and defective products if they encounter these in their studies? Ethical conduct obligates those who embark on research to publish positive and negative findings and proactively intervene to safeguard the community in identifying potential harms.

It reminds one of the stories titled “Whose job is it anyway?” (Reproduced verbatim from the writing of Lolly Daskal).

“This story is about four people named Everybody, Somebody, Anybody, and Nobody. There was an important job to be completed. Everybody was sure that Somebody would do it. Everybody could have done it, but Nobody did it. Somebody was angry because it was Everybody’s job. Everybody thought that Somebody would do it, but Nobody realized that Everybody would not do it. In the end, Everybody blamed Somebody when Nobody did what Anybody could have done”.

So which Body are dentists now relying on to monitor the media and to protect and educate the public? It seems that Everybody thinks it will be done by Any of the associated Bodies or Academic institutions such as SADA, HPCSA, BHF, ASA, CMSA, UP, UWC, SMU, or Wits? As such, Everybody is sitting back complacently, and Nobody is addressing the problem or need.

**CONCLUSION**

It is now time that individual dental clinicians become more accountable, active, and visible on television, social media sites and in popular publications providing educational information and, if necessary, dispelling false perceptions. We have a duty to the public – whether our patients or not – to help promote their oral health and general well-being and to protect them from potential harm. Is this not what we pledged to do when we took the Hippocratic Oath?

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**REFERENCES**