## Is there a decline of Scientific Output in South African Dentistry: Addressing the **Concerns and Nurturing Future Scientists**

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I have received comments in general discussion with colleagues who ask me whether scientific progress in South African dentistry has declined over the last decade. Researchers and academics often point to a decline in the quantity and quality of this research, leading to concern and speculation. While there is no definitive data or statistics to support these claims, anecdotal information suggests that the quantity of dental research publications in South Africa have declined over the past few years. This decline may be due to a number of factors, including financial constraints, lack of resources, limited time available, and his recent COVID-19 pandemic, which has further strained the field. However, these are not a sufficient explanation for the decline and the dental community needs to take action to address this problem.

Dental research is essential to advancing our field and providing quality dental care. Exploring new techniques, materials and treatments allows researchers to develop and improve ways to prevent and treat dental disease. This research will contribute to the wider field of healthcare and have implications for other medical specialties. Dental research also provides a platform for training young researchers who can contribute to this field. Academics and scientists in dentistry are often, but not always, employed by provincial departments of health. It is understandable that these departments have to prioritize service delivery over research output. As a result, researchers in dentistry often report to have less time and support to conduct research, that counterparts with purely University appointments. Furthermore, dual appointments, which are common in dentistry in South Africa, can also impact on the time available to perform research.

Declining scientific output is a multifaceted problem that requires multifaceted solutions. First, we need to ensure that researchers and researchers have the resources and support they need to do their jobs effectively. Financial constraints may limit the scope of research conducted and limit access to necessary resources such as laboratory equipment and specialized software. This problem is exacerbated by limited research funding and the relatively low profile of dental research in the South African medical community.

Second, we must prioritize the education and training of young researchers, providing them with the tools and skills they need to make regular and meaningful contributions to the field. In addition to formal training, mentoring and networking opportunities are essential to the development of young researchers. These opportunities enable the exchange of knowledge and expertise, as well as the development of new ideas and research collaborations. Ultimately, the goal should be to create an environment that supports and nurtures the next generation of dental researchers.

Third, there is a need to raise awareness among both the dental community and the general public about the value and importance of dental research. Dental research should be viewed as an important aspect of health care that has a real impact on the treatment and prevention of dental disease. To achieve this, we must reach out to a wider public, conduct awareness campaigns, and emphasize the importance of dental research and its benefits to society.

Finally, we must strive to improve collaboration among researchers, scholars and practitioners, break down silos and foster a culture of openness and collaboration. Collaboration helps overcome the limitations of individual research projects and enables the development of more comprehensive and impactful research. Collaborating also helps ensure that research is relevant to the needs and concerns of dentists and patients.

In conclusion, any perceptions reflecting a decline in scientific output in South African dentistry is a cause for concern, but it also presents an opportunity for growth and development. By addressing any possible root causes of the decline and nurturing future researchers, we can ensure that dental research continues to contribute to the advancement of the field and the provision of high-quality dental care. The dental community must take action to support research and researchers, prioritize education and training, increase awareness of the value of dental research, and foster collaboration among all stakeholders.

## Erratum

We wish to apologies for the errors in the article "Embracing new technology, with caution" in the February 2023 edition. The page numbering in the article is 49-51 and not 62-64 as listed above the author's names. Figure 3 on page 51 should appear in the article on page 12. Right is the correct Figure 3. This has been corrected on the digital version: 20 April 2023.

