EDITORIAL

RESIDENCY TRAINING: BRIDGING THE GAP BETWEEN MEDICINE AND DENTISTRY

Dentistry has long been perceived as a specialised branch of medicine and is often viewed in isolation from broader healthcare. However, emerging research and clinical experience increasingly highlight the essential role of oral health in systemic well-being.

The mouth is often described as a mirror of systemic health, with oral findings frequently providing early indicators of conditions such as diabetes, cardiovascular disease, and autoimmune disorders. Periodontal disease has been strongly linked to an increased risk of atherosclerosis and adverse pregnancy outcomes. Similarly, xerostomia (dry mouth) may signal underlying conditions like Sjögren's syndrome or be a side effect of commonly prescribed medications. Poor oral health can also contribute to medical complications such as endocarditis, pneumonia, and adverse pregnancy outcomes. Therefore, these strong interrelated connections will require some integration of dental education into medical residency programs to improve patient outcomes, foster interdisciplinary collaboration, and enhance healthcare delivery.

Currently, with the exception of the family medicine speciality, most residency programs in Ghana offer very little to no dental education in their medical residency program. It may be time to look again at this "Mouthless" Medical residency training and bridge the gap both in the curriculum and in practice. By incorporating dental education into residency programs, physicians will be better prepared to recognise and if not manage, refer patients with oral-systemic conditions to get the necessary and needed care.[1,2] This gap in education often leads to

- Missed Diagnoses: Physicians may fail to recognise early signs of oral conditions that could have serious consequences if left untreated, and that can also compromise the treatment being provided.
- Limited preventive guidance: Physicians are in a prime position to educate patients about disease prevention and oral hygiene, but without training, they may not prioritize these discussions.
- Inappropriate antibiotic use: Without proper training, medical residents may prescribe antibiotics unnecessarily for dental infections, contributing to antibiotic resistance

Beyond individual patient care, dentistry also plays a crucial role in public health. The increasing burden of non-communicable diseases, including oral cancers, periodontal disease and dental caries, calls for a more integrated approach to prevention and education. Fluoride programs, HPV vaccination campaigns to prevent oropharyngeal cancers, and early screening initiatives exemplify how dentistry contributes to broader health strategies.

Sheiham *et al*,[3] in advocating for a common risk factor approach in promoting oral health, argues that conventional oral health education is not effective nor efficient. Many oral health programmes are developed and implemented in isolation from other health programmes which often leads, at best, to a duplication of effort, or worse, conflicting messages being delivered to the public. He makes a case that since most of these oral conditions share common risk factors for a number of other chronic diseases, adopting a collaborative approach is more rational than one that is disease-specific. If this approach is highlighted also in our medical residency training, our health promotion programs may be more holistic and effective. Additionally, oral health disparities remain a pressing concern, particularly among underserved populations. Addressing these inequities requires interdisciplinary collaboration and policy-driven solutions.

By bridging the gap between medicine and dentistry during residency training, healthcare providers can work together more effectively to provide comprehensive patient care. By integrating dental training into residency programs, physicians will be better equipped to address oral health concerns, leading to improved patient care and more effective disease prevention.
Furthermore, healthcare is increasingly moving toward interdisciplinary models where different specialities work together to provide holistic patient care. However, the separation of medicine and dentistry remains a significant barrier. Training medical residents in dentistry can foster better collaboration between physicians and dentists by:

Encouraging Cross-Referrals: When physicians understand the importance of oral health, they are more likely to refer patients to dentists for timely intervention.
Improving Communication: Shared training experiences can help physicians and dentists develop a common language, making it easier to coordinate care for complex cases.

Enhancing Team-Based Care: Hospitals and clinics that integrate oral health into their medical teams see better patient outcomes, particularly for populations with high rates of oral disease, such as the elderly, diabetic patients, and those undergoing cancer treatment.

Strategies to incorporate Dental Training in Medical Residency Programs

Several strategies can be used to incorporate dental education into medical residency training:

- Integrated Curriculum: Residency programs should introduce mandatory coursework on oral health, covering topics such as oral infections, dental

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trauma, and the impact of chronic diseases on the mouth.

- Oral Health Rotations: Medical residents, especially those in primary care, emergency medicine, paediatrics and internal medicine, should complete rotations in dental clinics or hospital-based dental departments.
- Interdisciplinary Grand Rounds: Hospitals should hold joint case discussions involving both medical and dental professionals to improve collaborative problem-solving.
- Simulation Training: Using patient simulators, residents can learn to recognize and manage common oral health conditions, such as abscesses, ulcers, and oral manifestations of systemic diseases.

By incorporating these strategies into residency training, medical professionals will be better prepared to help address oral health concerns in their patients.

Conclusion

Oral health is a critical component of overall health, a siloed approach to healthcare provision can lead to fragmented patient care. Postgraduate medical training programs should integrate core dental concepts, particularly for specialities such as internal medicine, paediatrics, cardiology, endocrinology, and geriatrics. A collaborative model, where physicians and dentists co-manage medical conditions, can significantly enhance patient care. By integrating dental training into residency programs, physicians can develop a more comprehensive understanding of oral-systemic connections, leading to better patient care and stronger partnerships between medicine and dentistry. These may be achieved through joint training programs, research initiatives, or integrated clinical pathways. By doing so, we can break down the barriers between these disciplines and create a healthcare system that truly prioritizes holistic patient well-being. As healthcare continues to evolve toward a more holistic, team-based approach, embracing this synergy and closing the gap between medicine and dentistry will be essential for advancing comprehensive, patient-centred care and improving outcomes.

References

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