Obafemi Aolowo University
Ile-Ife, Nigeria

Leaving Toothprints

In The Sands Of Time

An Inaugural Lecture

Delivered at Oduduwa Hall,
Obafemi Awolowo University,
Ile-Ife, Nigeria

on Tuesday. May 14th, 2024

By

Morẹ́nikẹ́ Oluwátóyìn Ukpong
BChD, MBA, MEd, PhD, FWACS, FAS
Professor of Paediatric Dentistry

Inaugural Lecture Series 382

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Preamble

The Vice Chancellor, Deputy Vice Chancellors – Academic, Administration, Research, Innovation and Development, Registrar, Librarian, Bursar, Provosts, Deans of Faculties, Professors, Directors, Heads of Departments/Units, Colleagues, Students, Invited Guests, Ladies and Gentlemen.

I stand before you today with a profound sense of gratitude and humility as I embark on this momentous occasion, to deliver this inaugural lecture titled "Leaving Toothprints in the Sands of Time." It is indeed an honour to share my journey through the realms of dental science and its social impact.

My journey into dentistry was an accidental adventure. As it was, in my last year in secondary school, we had to complete a JAMB form. My childhood friend, Dayo Oyebade, who is here with me today, talked so much about metallurgical engineering. I had no clue what it was, but it sounded exotic. I reported to my parents that I wanted to do the same. My father asked me to study medicine. I did not have the best relationship with my father, and so for me, I was not going to do medicine because he said so. I then got back to school, checked the JAMB form of a peer who was sitting in front of me in school – Bunmi Longe – and filled what she filled in her form. Voila, I passed JAMB with a score of 267, came for the interview, and graduated as a dentist.

Post graduation, I think my classmates and I knew we were all groomed by our highly esteemed teacher and mentor, Prof Odusanya, to be resident doctors. He instilled in us qualities of grit, resilience, discipline, and a quest for excellence. Most notably, he enabled us to think through our career pathways and gave us a clear sense of our future endeavours before we finished dental school. I aspired to pursue my residency in Orthodontics due to my commendable performance in the course. I also thought of being an oncology radiologist. Not that I knew what that entailed but because there was a gap in the field at that time. As I reflect on my life trajectory, I think I had always looked for gaps to fill in the journey of my life.

I finally settled to train as a Paediatric Dentist because my exposure in my final year following my resit in this same course enabled me to grow a competency I could not have had without the clinical failure in my final year. Undeterred, with the resit, I took matters into my own hands, travelled to Lagos University Teaching Hospital, sought an audience with the Dean, and introduced myself and my mission. The Dean then entrusted me to Professor Elizabeth Sote, who graciously agreed to train me. I am forever grateful for that. During this brief yet transformative period, I was trained by five distinguished professors in Paediatric Dentistry—Profs Adenubi, Idowu, Salako, Bamboye, and Sote. They imparted both clinical expertise and theoretical knowledge, and I diligently studied the notes of their previous students. Additionally, I received invaluable assistance from the preeminent Dental Surgery assistant of that time, Mrs. Oni. In the span of three months dedicated to resit preparation, I had a profound understanding of the practice of Paediatric Dentistry.

Armed with this newfound knowledge and skills and an impressionable event at the paediatric dental clinic during my undergraduate training, I chose to undertake a residency training in Paediatric Dentistry. I recalled efficiently managing a child's behaviour to facilitate the administration of local anaesthesia—topical anaesthesia being unavailable at that time—and successfully performing an

extraction without any signs of distress. The key to successfully managing the child was building a trusting relationship. That trust enabled me to navigate through the procedure seamlessly which could otherwise, have been painful and filled with child drama. This incident solidified my decision to specialize in Paediatric Dentistry and laid the foundation for my research and clinical practice in behaviour management.

From the very inception of my career, Paediatric Dentistry has been more than a profession to me; it has been a calling, a commitment to improving oral health and leaving an indelible mark on the lives of vulnerable individuals and communities. I share this story of little beginnings to reinforce the understanding that things truly work together for good. In addition, perspectives about what counts as true failures need to change. I have seen many undergraduate students whose clinical competency and self-confidence improved dramatically because they took their resit exams seriously. I have also seen a new trend emerge in this University when lecturers and course coordinators pass students who otherwise should resit or repeat a course for reasons that cannot stand the test of time. When we choose to invest in strengthening the foundations adolescents and young people lay, we are more likely to have invested in a generation of young people who learn resilience, self-esteem, and character from the events of life. Our collective efforts as parents, teachers, and students to strengthen our knowledge based when found weak should not be jettisoned. It is the pillar for the future, and one that enables us leave footprints in the sands of time.

As we traverse the landscape of this lecture, we will explore the pivotal intersections between dental science, research, community engagement, and the broader social fabric.

PART 1: The Art and Science of Dentistry

In the first part of my narrative, I will delve into the intricate world of dental science, where precision meets artistry. From the delicate nuances of restorative dentistry to the ever-evolving landscape of dental technology, I have witnessed and contributed to the continuous advancement of this field. Together, I will explore with you the transformative power of cutting-edge research, embracing innovation as we seek to redefine the boundaries of dental excellence.

At the heart of dental science lies the delicate art of restorative dentistry—a discipline that blends meticulous precision with the creative finesse required to reconstruct and enhance the natural beauty of the human smile. The process involves repairing dental structures and striving to balance functionality and aesthetics harmoniously. Over the years of my experiences, I have witnessed the profound impact that precision in restorative dentistry can have on children's lives, restoring their oral health, confidence, and self-esteem.

The landscape of dental technology is in a perpetual state of evolution, driving the field towards new horizons. Technological advancements have revolutionized diagnostic tools, treatment modalities, and patient care. As a witness and contributor to this ongoing transformation, I have seen the integration of digital imaging, computer-aided design, and manufacturing, and other innovative technologies that have elevated the precision and efficiency of dental procedures. The advent of 3D printing, intraoral scanners, and virtual reality in dental education has opened doors to unprecedented possibilities, reshaping how we approach diagnosis, treatment planning, and patient communication.

Innovation is at the core of our narratives, as we dental professionals embrace cutting-edge research to push the boundaries of what is achievable. Research becomes a powerful catalyst for change, driving materials, techniques, and treatment advancements. Exploring the frontiers of dental science allows us to challenge conventional norms, question established practices, and pave the way for revolutionary breakthroughs. From bioactive materials that promote tissue regeneration to novel approaches in pain management, research serves as the cornerstone of progress in the field.

Embracing innovation in dental science requires a collective effort from practitioners, educators, and researchers. It involves staying abreast of emerging technologies, participating in interdisciplinary collaborations, and fostering a culture of curiosity and continuous learning. The commitment to redefining the boundaries of dental excellence is a professional obligation and a shared passion that unites the dental community in a collective pursuit of advancing patient care and oral health outcomes.

I embraced the artistry of the science of Dentistry to shape my career into that of a Paediatric Dentist. My initial foray into innovation centred on elevating the quality of clinical care provided to children seeking paediatric dental services. During the early stages of my residency training, my seniors were away for their postgraduate trainings. Drawing inspiration from my experiences at Dr. Oluwole's private clinic at the Rock Dental Centre in Lagos, I introduced the practice of pulp therapy for children at the Paediatric Dental Clinic and raise the bar on infection control practices by introducing newer infection control modalities.

In addition, I collaborated with my colleague, Prof Elizabeth Oziegbe, to embark on a transformative journey at the Obafemi Awolowo University Teaching Hospitals' Complex Ile-Ife, to establish child behavioural management and sedation dentistry as conventional norms. Child management practice is not just a science we mastered but an art we perfected, turning children's oral care into a social responsibility. Our approach involved delving into the social aspects of children's lives, understanding the aetiology of their temper tantrums, and addressing the root causes rather than merely focusing on the oral health issues that brought them into our care.

I vividly recall three cases that exemplify our unconventional yet effective strategies. The first involved a child with a bilateral symphysial fracture, brought into the clinic by two men—a highly unusual circumstance. Additionally, the explanation for the fracture raised suspicions, and when we requested radiographs, the case was lost to follow-up. We felt this was a case of child abuse of some sort. Unfortunately, we failed to conclude the case.

The second case was a child brought in with oral genital warts, prompting suspicions of involvement in the sex trade. Despite our efforts to have them undergo radiographs, the family disappeared, leaving us with another lost opportunity for intervention. We tried to track the child using the phone number given. It was a false phone number therefore, consolidating our suspicion.

The third case, however, stands as a testament to the success of our approach. A child prone to temper tantrums due to a tumultuous family situation and a reputation as a school bully presented a significant challenge. Beyond dental care, we addressed the social issues, involving the child in the clinic during holidays and entrusting him with the care of a teddy bear. This holistic approach significantly transformed the child's behaviour, even during dental procedures.

I also recall a fourth case of a child with recurrent acute necrotizing ulcerative gingivitis, which was not expected. We delved into the history of the child and found that the child was from a broken home, and the sister – a young girl of about 15 years – had become the sole carer for this child. They lived from hand to mouth, sleeping in churches to survive. We knew beyond reasonable doubt that the girl must have experienced sexual assaults to have survived so long. Prof Oziegbe took the pain to integrate them into an orphanage where the two youngsters could continue receiving parental care.

These four stories highlight our roles as Paediatric Dentists whose responsibilities expand to protecting children from vulnerabilities. Oral health problems are major features of child neglect and child abuse. Paediatric Dentists are often first responders to child abuse. As the four cases highlighted, we only successfully managed two of the four cases. Sadly, there is no national protocol to enable us effectively manage child abuse limiting the wholistic care of suspected cases. I raised this huge concern in my publication on child dental neglect having studied the management of cases in 26 countries and found gaps in legislations [1]. As Paediatric Dentists, we see a lot more cases than you can imagine, and I look forward to leading reforms to reduce the risk of children to abuse through the paediatric dental care pathway.

As Paediatric Dentists, our behavioural management strategies extend beyond textbooks; they encompass social care to address clinical problems. As part of our routine practice, we accompany patients on medical referrals, ensuring a smooth transition to their first medical care. This collaborative approach extends within the dental clinic, where our patients referred to other

Departments receive support from our dental team during their care in the new clinics. Transiting clinics creates new form of stress for patients.

Transiting clinics often leads to a loss of patients to care. Referrals are made to provide better care for patients. It is their responsibility to meet the specialist to whom they are referred. Yet, one out of every three patient referrals don't turn up for care [2]. If not properly managed, it causes unnecessary delays in treatment. Patients also feel a sense of confidence in working with those people they know. The practice in Paediatric Dentistry to follow-up with the care of patients is because we understand this science and seek to pursue our patients care as best as possible. To improve this practice, we invite specialists to care for the child patient in the dental clinic. We realized that keeping our patients in a familiar environment improves the team's ability to provide continued care and eliminate the loss of follow-up from transiting clinics.

These stories illustrate the depth and impact of our behavioural management strategies. They reflect our commitment to understanding and addressing the broader social context in which oral health issues arise. By integrating social care with clinical expertise, we aim not only to treat dental problems but also to enhance the overall well-being of our young patients. This approach, unconventional as it may be, aligns with our belief that effective Paediatric Dentistry transcends traditional boundaries, embracing a holistic perspective that extends beyond the confines of the dental chair.

Paediatric Dentistry at the Obafemi Awolowo University transcends conventional boundaries by incorporating science principles and the expressive elements of performance arts. This unique approach recognizes the multidimensional nature of the dental care provided to children, emphasising the importance of creativity, communication, and empathy in the pursuit of optimal oral health outcomes. Our practices are well recognised among our peers and our ability as a team to take children through oral health care without tears is very well acknowledged. Our practices have also been replicated in other institutions through the resident doctors who come to Ife to learn.

At the core of this innovative practice is the recognition that children often respond more positively to an environment that engages their imagination and emotions. It creates a positive and comforting atmosphere within the clinic. We use colourful props, puppetry, and interactive elements to enhance their experience of the clinic. Visual arts play a significant role in the paediatric dental setting. The use of vibrant and child-friendly décor, murals, and educational posters transforms the clinical environment and serves as visual aids for explaining oral health concepts to young patients. The integration of art into the dental experience helps create an atmosphere that is both educational and aesthetically pleasing, fostering a sense of comfort and familiarity. In addition, we incorporate child-friendly tunes, sung during dental procedures as this has the dual effect of providing a soothing atmosphere and serving as a distraction from potential discomfort. The rhythmic elements of music can contribute to a sense of predictability and control, reducing anxiety and promoting a positive dental experience for the child. If anyone of you have been to the dental clinic in Ife, you would be very familiar with a clap rhythm in the Paediatric Dental Clinic. Ironically, this clap rhythm is used in several other Paediatric Dental Clinics in Nigeria almost becoming a national Paediatric Dentistry clap rhythm. As simple as this may be, it all originated in Ife through the diligence study of a combination of arts and science. Ironically, we do not have an intellectual property right on the clap.

My research on using behavioural management strategies with children indicated that combining these strategies improves children's behaviour outcomes. I conducted several studies on behavioural management strategies for childcare in the dental clinic. Behavioural management strategies aim at cognitive reorientation, resulting in better instruction compliance. I found that the dentists at the clinic routinely combine several behaviour techniques when they want to perform invasive procedures like giving dental anaesthesia or during an extraction. They also combined several procedures when the children's dental anxiety levels were high. Combining techniques decreased dental anxiety more effectively than when only one technique was used [3]. In addition, the use of behaviour management strategies decreases dental anxiety post-treatment while the non-use of the techniques increases anxiety post treatment [4]. Furthermore, dentists with more years of experience were better at using behaviour management strategies effectively than dentists with less years of experience [5]. Also, mothers can better predict their children's behaviour in the chair, while the child's report of their anxiety level is less likely to correlate with their actual perception of dental fear [6].

An earlier study I conducted with Ola Dennis in his final year had correlated this last finding about being cautious with dependency on the self-reporting of dental anxiety levels by children and adolescents. We showed that when it came to self-reporting, girls were more anxious than boys. However, when we took physiological parameters like respiratory and pulse rates, there was no significant gender difference in the reporting of dental anxiety [7]. We concluded that this difference in response, despite the similarity in experience, reflects the impact of culture in the tapestry of paediatric dental care. The Nigerian culture teaches masculinity, and the need for the man to be strong in the face of pain and care. There are growing concerns about this push and propensity for masculinity even at an early age. Here, we recognise the possible interference with care as children who report little or no dental anxiety would be treated with less combination of behaviour management techniques unlike those who are free to accept they have anxiety and fears. Children with masculinity tendencies are, therefore, less likely to be introduced to care that can address their anxiety management needs.

This unveiling of a cultural tapestry in Paediatric Dentistry is a gateway to STEAM (Science, Technology, Engineering, Arts, and Mathematics) research and decolonized science. Incorporating culture into Paediatric Dentistry represents a departure from traditional models, recognizing that healthcare is deeply embedded in societal values, beliefs, and practices. As cultural beings, children are not isolated from their surroundings; rather, their perceptions and responses to healthcare are intricately intertwined with their cultural backgrounds. By acknowledging and embracing this cultural context, Paediatric Dentistry transcends the confines of a clinical setting, becoming a dynamic intersection of science and the diverse cultural tapestry that shapes the lives of young patients.

This innovative approach offers a profound opportunity to establish a new field of study within Paediatric Dentistry—that harmoniously merges the arts and sciences. The term "STEAM" encapsulates the synergy of disciplines, and its integration into Paediatric Dentistry amplifies the importance of holistic, culturally informed research. Including the arts encourages creativity, expression, and a deeper understanding of the cultural nuances that influence children's responses to

dental care. As we advocate for STEAM research, we recognize the imperative to decolonize science, unravelling the Eurocentric biases embedded in traditional research methodologies.

The push for STEAM research in Paediatric Dentistry aligns with the broader global initiative to decolonize science. Traditional scientific research often carries inherent biases from historical, cultural, and geographic perspectives. By infusing cultural considerations into the scientific inquiry, we embark on a journey to dismantle these biases and foster inclusivity. Paediatric Dentistry becomes a dynamic space where cultural diversity is acknowledged and celebrated as a crucial determinant of health outcomes and patient experiences.

The significance of this cultural integration becomes even more evident when considering its potential impact on healthcare disparities. Cultural competence in Paediatric Dentistry ensures that healthcare providers navigate the intricacies of diverse cultural backgrounds, promoting effective communication, understanding, and trust between the dental team and young patients. This, in turn, leads to more personalized and equitable healthcare, ultimately addressing disparities that may have arisen from cultural insensitivity or lack of cultural awareness in healthcare practices.

The utilization of performance arts in Paediatric Dentistry manifests the broader philosophy of patient-centred care, emphasising an approach that prioritises young patients' unique needs, preferences, and experiences. Integrating performance arts into dental practice transforms routine procedures into engaging and positive experiences for children and fosters an environment that encourages trust and collaboration between dental practitioners and their young patients. Despite the evident benefits, this innovative field has received limited investment and attention. Growing this aspect of Paediatric Dentistry requires a shift in focus toward recognising the profound impact that performance arts can have on children's overall well-being and oral health outcomes. Investing in the development and expansion of performance arts in Paediatric Dentistry is an investment in children's emotional and psychological comfort during dental visits, ultimately contributing to a future generation that values and prioritises their oral health.

As we at Ife champion this multidisciplinary approach to patient care delivery, we simultaneously contribute to the ongoing effort to decolonize science, fostering a more inclusive, culturally sensitive, and equitable future in paediatric healthcare. This cultural revolution within the sciences represents a significant step towards creating a healthcare landscape that genuinely reflects the diverse needs and experiences of the young individuals we serve. It is about recognizing the individuality of each child and tailoring the dental experience to their unique needs. This approach can promote a positive attitude toward oral health that can have lasting effects into adulthood. Moreover, it can contribute to establishing a foundation for a lifetime of good oral health habits, instilling in children the importance of regular dental visits and proactive care.

PART 2: Beyond the Clinical Walls

Recognizing the interconnected nature of Paediatric Dentistry propelled me beyond the confines of clinical walls, leading to an exploration of the broader world of community engagement. Paediatric Dentistry extends its impact beyond the traditional boundaries, infiltrating the core of communities and societies. In this phase of discussion, I delve into my experiences in community engagement, emphasizing the pivotal role of my dental education in advocating for health education, prevention, and improved access to care. Initiatives designed to bridge the gap between scientific knowledge and the communities we serve form a crucial part of this exploration, aiming to leave a lasting positive impact on the health of diverse populations.

My venture beyond the confines of Paediatric Dentistry commenced with my commitment to providing care for individuals living with HIV. As a dentist, most of my undergraduate and residency training was dedicated to immersing myself in the acquisition of medical and surgical skills and knowledge. In the nascent stages of the HIV epidemic, I collaborated with three esteemed colleagues—two nurses, Ms Fakande and Mrs Bola Oke, and a laboratory scientist, Mrs Akinbola—to pioneer a compassionate initiative offering home-based care to people living with HIV. This initiative evolved to become Living Hope Care, Ilesa. During this period, the concept of formalized home-based care was yet to be established, and our team decided to undertake this endeavour driven by the ethos of doing good. Leveraging my medical knowledge became imperative, necessitating continuous study and expansion of my understanding of medicines to deliver comprehensive medical care within the homes of individuals living with HIV.

Sadly, during this era, hospitals often rejected patients living with HIV, and families were known to ostracize their kin upon receiving an HIV diagnosis. Faced with these challenges, Professor Elujoba emerged as our go-to medical expert, providing essential care, especially in managing opportunistic infections. In the absence of formalized medical care, our collaborative efforts were not only groundbreaking but also reflective of a commitment to humanitarian principles, showcasing the resilience and resourcefulness required to navigate the complex landscape of providing care to those affected by HIV in a challenging societal context.

My intellectual aptitude compelled me to explore solutions for the predicament faced by the individuals we served, recognizing them first and foremost as boys, men, and women before identifying them as people living with HIV. Acknowledging their fundamental right to life in an era that preceded the involvement of donor agencies became a driving force in my pursuit. Faced with the absence of external support, I worked with journalists through the late Omololu Falobi, to harness the power of the internet for awareness creation. This experience illuminated the profound impact of media and social engagement in advocating for the right to care and life. My work with Omololu and the Journalist against AIDS was a life-changing experience as I learned that more can be done through advocacy and active engagement with policy makers. Sitting behind the confines of the clinic walls was touching lives one at a time. Moving into the public health space was reaching thousands and millions of lives. I embraced the power of Public Health and gradually moved into the space by self-training myself in epidemiology.

In this endeavour, I gained insights into the diverse lives of marginalized communities, including lesbians, gays, men who have sex with men, and the challenges faced by women and young girls involved in sex work. It became evident that sex work, for many, was a means of survival. It is also a profession for many. I learnt to see beyond the shadows and understand how sex work was the family sustaining options for both men and women. How, people are truly different in their sexual orientations – a minority of the population are truly attracted to the same sex just the way the majority are attracted to the opposite sex. How their differences, their minority status, their non-conformist lives, often puts them in multiple dangers. These dangers include people justifying inflicting hurts and pains, and in many cases, killing minority individuals simply because they choose not to accept differences and respect sexual diversity as one of the many diversities life offers. My history of engaging with vulnerable and stigmatized populations makes me always consciously aligned with those with the influence to amplify their voices. Transforming my academic prowess into a social voice for justice, I utilised my understanding of the plights of minority populations and position myself to advocate for their rights and well-being through my writing, emphasizing the importance of empathy, understanding, and social justice in my advocacy work.

Within this domain, over 70% of my 351 publications have been dedicated to highlighting critical issues affecting socially marginalized populations' health and rights. I have authored along with peers, 37 manuscripts addressing the health needs of individuals living with HIV, looking at issues such as the sexual and reproductive health and rights [8-10], mental health [11, 12], and oral health needs [13] of the population. I have worked with sexual minority groups [14, 15], adolescents [16-23] and key populations – people who inject drugs, queers, sex workers, those incarcerated and transgenders [24-31] - to address their rights to health because they have rights to health. I have worked with others to translate research-based evidence to support applications for national grants and support the development of national policies and programmes to improve the population's access to health. In this capacity, I have served as a voice where their voices need to be heard [32, 33].

My exploration extended to the specific challenges during the Ebola epidemic. The voice of my team during the Ebola epidemic was to amplify the ethical conduct of research, respecting the culture of communities in West Africa when designing and implementing biomedical research. I raised voices on the need to identify the communitarian nature of communities in West Africa and the inappropriateness of randomised clinical trials during an epidemic where collective decisions need to be made about prioritised access to limited lifesaving experimental drugs [34-53]. It was a battle of intellects, pushing the frontiers of epidemic response through active engagement in the research publication space. I acknowledge Prof Clement Adebomowo for his excellent leadership at this time as he spoke up with his research pen on the need for ethically conducted research that was respectful of the culture of the people. I am grateful to my research partners at this time also – Aminu Yakubu, Kris Peterson, Bridget Haire, – whom together, we amplified the voices of the community and promoted the value of community in the design and implementation of the Ebola response.

My team and I, working through four research groups, brought our strengths to generate evidence for the COVID-19 pandemic. We worked together to generate data from over 23,000 persons recruited from 152 countries around the world to write 61 manuscripts from 2020 to 2023 [54-114]. These research publications present a comprehensive examination of the various impacts of the COVID-19 pandemic across different regions and populations. They collectively contribute to a nuanced

understanding of the multifaceted impacts of the COVID-19 pandemic on health, well-being, and healthcare systems across diverse populations and regions. They provide valuable insights for public health interventions, policy development, and future research efforts. These manuscripts provided critical evidence to inform our understanding of the global crisis, and we ensured that the critical voices were not left behind in decision-making and global response. The evidence we generated influenced the position of UNAIDS on the impact of the COVID-19 pandemic on diverse populations of women and girls living with and at high risk of HIV.

In addition, I actively participated in advocacy efforts with colleagues, amplifying the voice for sub-Saharan Africa and emphasizing the imperative for ethical community engagement in research during the pandemic. Our collaborative efforts resulted in 16 publications addressing these crucial aspects [115-126]. My foray into bioethics discussing ethical engagement in research, spanning topics focused on diseases and populations. In doing so, I sought to push the frontiers of conducting research that is not only ethically responsive but also attuned to the intricacies of African culture. Recognising my role as a problem solver, I immersed myself in problem-solving research, utilizing research skills to address real-world challenges and contribute to advancing knowledge in critical areas.

I have contributed to publications focusing on the health and rights of adolescents, recognising the distinctiveness of this population. More recently, I call for research to recognise the intersectionality of oral, mental, sexual, and reproductive health among adolescents. This concerted effort aims to shed light on the interconnected nature of these health dimensions and their collective impact on the well-being of adolescents. By addressing this multifaceted intersection, we as researchers, can bridge gaps in understanding and contribute to a more comprehensive approach to adolescent health research that acknowledges the intricate interplay of these vital components.

My work with Nadia Sam-Agudu, Maha El Tantawi, Elizabeth Oziegbe, Boladale Mapayi, Olakunle Oginni, Nneka Chukwumah, Abiola Adeniyi, through the Oral Mental Sexual and Reproductive Health Group, led to the publication of papers that highlights the intersections of these three disease entities [127-133] as show in the Figure 1.

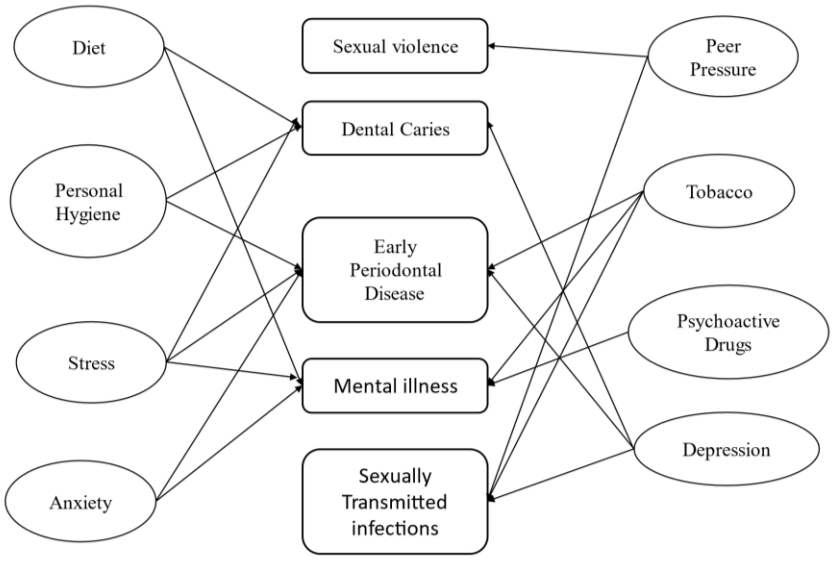

Figure 1: conceptualisation of the links between oral, mental, sexual and reproductive health

We started by conceptualizing the links and proposing a feasible continuum of care for adolescents by planning their access to mental, sexual, and reproductive health through the clinic, as shown in Figure 2 [134]. We found the draft 2022 national oral health policy incredibly supportive of implementing this framework and feel poised to test this connection.

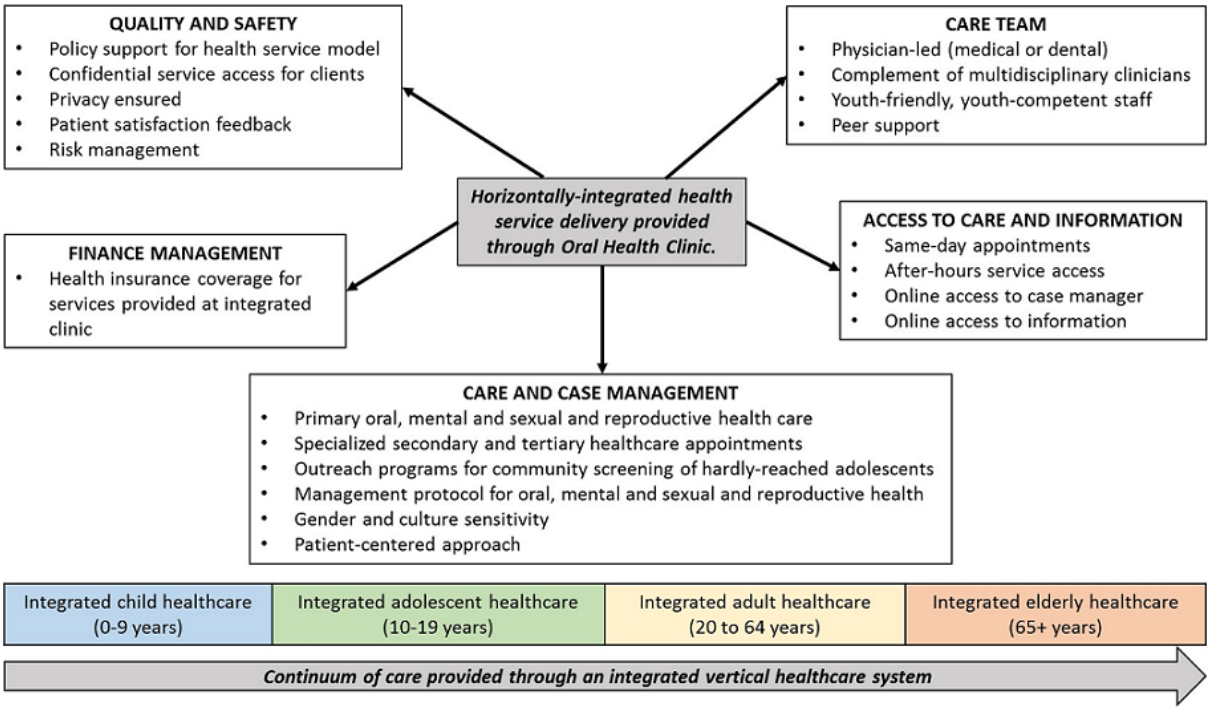

Figure 2: Continuum of care for integrated care for adolescents in the dental hospital

We generated evidence on the links as shown in the Figure 3 [135].

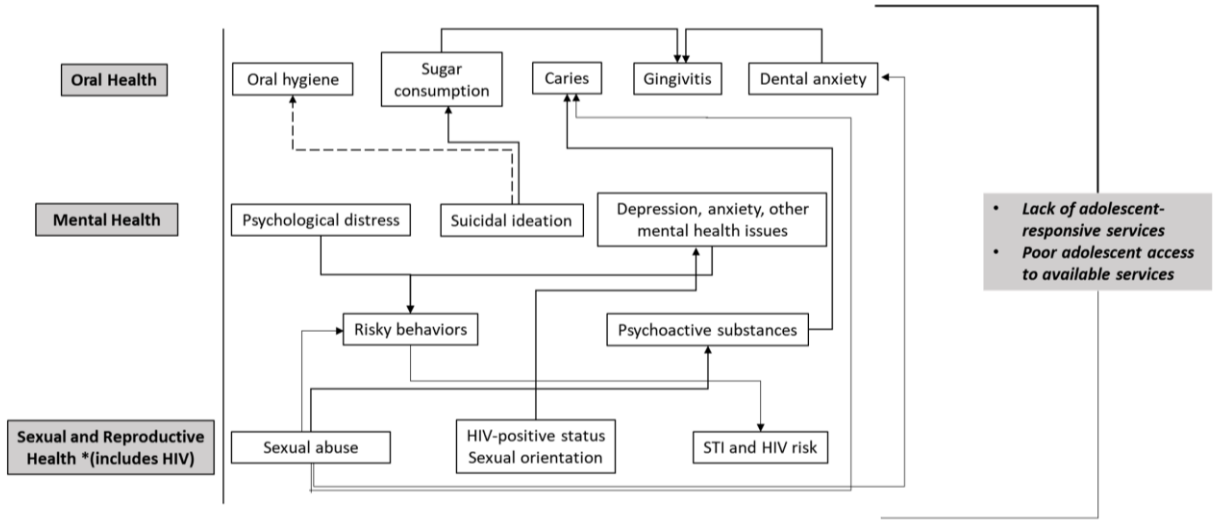

Figure 3: Evidence on the links between oral, mental, sexual and reproductive health

We are currently working on a feasibility study to demonstrate the operationalization of the links using the theoretical model, as illustrated in Figure 4. We hope to be able to scale up this piece of work through some other grants, thereby pushing the frontiers of integrated healthcare practices.

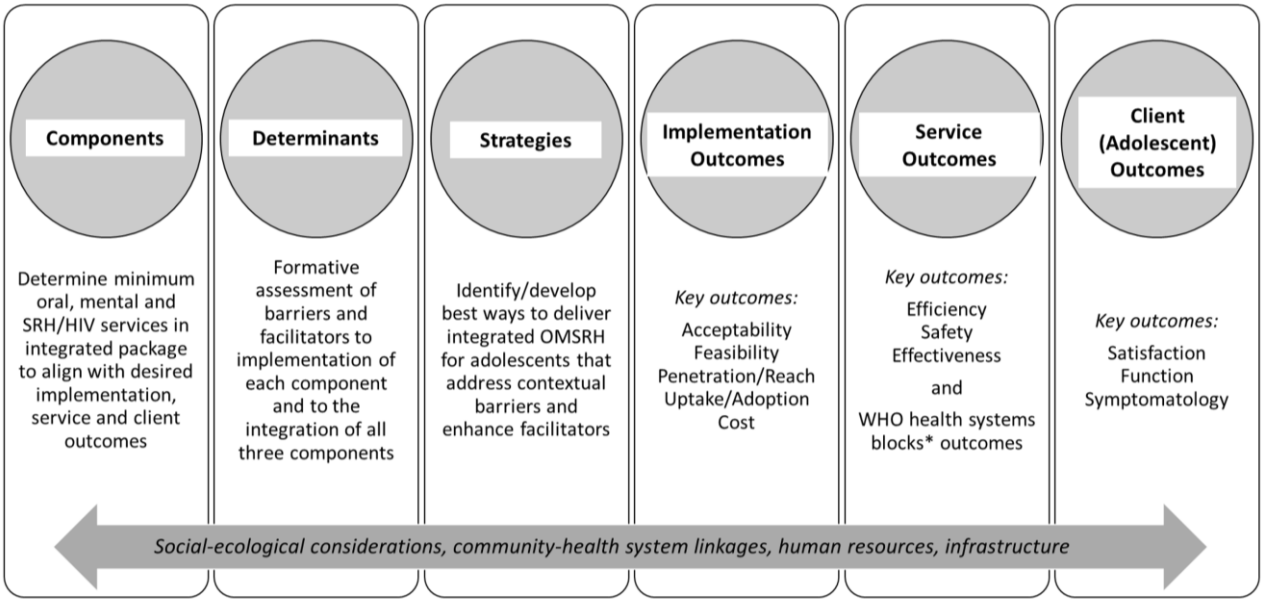

Figure 4: Implementation science design to explore the integration of mental, sexual and reproductive health within oral health care services

I am incredibly proud of this piece of work as we generate new knowledge for integrated healthcare practice. The push for integrated healthcare practice is not new. What is lacking is culturally relevant evidence of models that can work. This work is set out to generate novel knowledge for advancing integrated oral healthcare practices. We propose that the oral health platform, which is a non-stigmatized care delivery platform, can be used to address the stigmatised mental, sexual, and reproductive health needs of adolescents. First, we project adolescents as independent from adults and children because of their different psychological health needs. Second, we show that by combining approaches to provide oral, mental, sexual, and reproductive healthcare needs for adolescent, a continuum of care can be provided to improve the quality of life of adolescents in the time leading to adolescence and the time leading to adulthood.

While the advocacy for integrated healthcare practices is not a novel concept, the current gap lies in the deficiency of culturally relevant evidence for effective models. While the call for integration is longstanding, the immediate need is to establish and validate culturally appropriate models that can effectively operate within diverse societal contexts. This work strives to address this void by providing meaningful insights and evidence that can pave the way for implementing culturally tailored integrated healthcare models, ultimately enhancing the quality and inclusivity of healthcare delivery.

As researchers in sub-Saharan Africa, we must develop tools to enhance our communities' quality of life. We are committed to adaptation where possible and generating knowledge in situ when

necessary. Taking this commitment to a higher level, my team and I initiated the Oral Health Initiative at the Nigerian Institute of Medical Research in Lagos. Collaborating with Prof Owotade (a Professor of Oral Medicine at the Obafemi Awolowo University, Ile-Ife) and Prof Oliver Ezechi (Director of the Center for Population and Reproduction Health Studies at Nigerian Institute of Medical Research), we embarked on this initiative with a grant from Nigerian Institute of Medical Research, aiming to generate evidence on the profound impact of oral health on general health. Our primary goal is to provide evidence that could be used to operationalise the draft 2022 Oral Health Policy.

Utilizing the grant from Nigerian Institute of Medical Research, we conducted a comprehensive program that included a one-week boot camp and 12 months research mentorship. This one-year initiative focused on producing evidence on the impact of oral health on pregnancy outcomes and the potential influence of oral health insurance on care accessibility. The reviews conducted during this period unequivocally indicated that poor oral health contributes to adverse pregnancy outcomes [136, 137]. Additionally, we discovered that accessibility of oral health insurance does not necessarily translate to increased uptake of oral health care. In addition, there is a poor appreciation for preventive oral health care [138].

These findings propelled us into the next phase of action. Our primary objective is to advocate for integrating oral health care into maternal health care practices through collaboration with the Society of Gynaecology and Obstetrics of Nigeria (SOGON), leveraging the evidence we have gathered. Additionally, there are ongoing plans to facilitate a meeting with the Technical Working Group on Oral Health in Nigeria, in collaboration with select international partners the aim of which is to engage in translational research to translate our research findings into actionable policies and practical oral health programming for Nigeria.

This comprehensive approach is rooted in our commitment to enhance the health and well-being of our communities. Recognizing the cultural context that influences health-seeking behaviour for preventive care, we emphasize the need to explore this aspect further. Previous studies have indicated that dental service utilization in Nigeria has predominantly been driven by the demand for curative care [139, 140]. The prevailing health care seeking behaviour in Nigeria is primarily oriented towards seeking curative treatments, and there is a notable deficiency in efforts addressing preventive health care seeking behaviour. Further research, especially implementation research, is encouraged to delve deeper into understanding and addressing these cultural dynamics to foster a more comprehensive approach to oral health care in Nigeria.

My second significant project is collaborating with the Early Childhood Caries Advocacy Group. It is an international group of researchers that has remained cohesive since its inception in 2018. The initial focus of our collaborative efforts was centred on the macro-structural impact on the risk of early childhood caries. This group has dedicated efforts to uncovering evidence regarding the impact of macro-level factors on the susceptibility to caries in infants, toddlers, and preschool children. In doing so, we have expanded the scope for innovative research approaches in this domain. This work catalyses a nascent global research field on early childhood caries.

More recently, we have published a series of scoping reviews that explored the intersections between early childhood caries and the Sustainable Development Goal [141-152]. These reviews systematically present existing evidence, identify gaps in the current knowledge base, and provide

clear directives for generating new evidence utilizing cost-effective methodologies. This work advances our understanding of early childhood caries and serves as a guidepost for future research endeavours, emphasising efficient and impactful approaches to address this critical oral health concern [153-159]. We hope that demonstrating these links can help promote research that pulls resources from the Sustainable Development Goal field to provide evidence on the contributions that responding to early childhood caries management can make. As we continue to partner and collectively contribute within our distinct spheres, we aspire to propel groundbreaking new works that advance the understanding and management of early childhood caries on a global scale.

This undertaking, involving collaborators from across the globe, originated from a seemingly modest catalyst – the rejection of a 500-word piece on early childhood caries for a newsletter. Determined, I expanded and reworked the piece into a 1500-word manuscript, which I submitted to a Q2 level journal, and to my delight, it was accepted for publication. The rapid assembly of the 1500-word manuscript detailing the epidemiology of early childhood caries in Nigeria took me less than a day. Subsequently, I seized the opportunity to rally for global participation in writing a book that reports the worldwide landscape of early childhood caries [160]. This book marks my second book publication. The first was inspired by a gift I received from a sister and friend. She travelled to India and bought me a simple book in multiple questions in Paediatric Dentistry. I worked on my inspiration and wrote a book titled: 1000 multiple choice questions in Paediatric Dentistry. I wrote this in collaboration with peers in the field of Paediatric Dentistry in Nigeria.

In summary, my adventures beyond the confines of Paediatric Dentistry were driven by inspiration – sparked by encounters, motivations, and the call to respond. Many of you gathered here may share similar inspirations but might hesitate to translate them into actions, held back by the fear of potential failure. Yet, the steps toward leaving footprints of success begin with a stumble. I am familiar with the impact of falls.

I vividly recall my daughter, Omotoyosi, who delayed walking until her first birthday after a stumble in her initial attempts. However, once she bravely took that first step at age 1, Motoy never looked back. Learning from her falls, she views them as valuable lessons or stepping stones. I hope, like Motoy, each one of you can transform your motivational stories into small successes that can serve as inspiration for the next generation thereby leaving your footprints in the sands of time.

PART 3: Advocacy for Social Change

My engagement beyond clinical practice leads me to delve into the third aspect of this inaugural lecture: the narrative of my role as an advocate in instigating social change. Through my journey, I have become a proponent of causes that extend beyond oral health, striving to advocate for policies that address the broader social determinants of health. Collaborating with scientists and national, regional, and international community advocates, we collectively explore the intricate interplay between health and overall well-being. This exploration emphasizes the significance of a holistic approach, contributing to creating a healthier and more equitable society.

Central to my advocacy efforts is a push to shift the care paradigm from one that is primarily public health-centric perspective to a rights-centred personalised care approach. While rights-centred care prioritizes the needs of every individual, public health focuses on the collective well-being of the majority. My advocacy work aims to harmonize these approaches, recognizing the importance of individual rights and the broader public health context.

A key focus of my advocacy endeavours is addressing early childhood caries as a rights issue. This commitment underscores the importance of examining oral health through a comprehensive lens encompassing broader societal perspectives. It involves advocating for policies beyond surface-level solutions and promoting systemic changes. Through my advocacy work, I aim to contribute to a paradigm shift in healthcare, fostering a society where health equity and overall well-being are paramount considerations benefiting everyone.

Compelling research evidence highlights early childhood caries as a disease associated with poverty. The most vulnerable are children whose parents face barriers to education, lack access to essential information, struggle to obtain healthcare, and reside in poor neighbourhoods, thus exposing these children to suboptimal nutrition [161-163]. The wealth of studies my colleagues and I have conducted in Nigeria reinforces these global findings [154, 157, 164]. Furthermore, systematic reviews conducted by the Oral Health Initiative have yielded profound evidence, indicating that twice daily toothbrushing is a protective measure for caries in Nigeria. Interestingly, the risk of early childhood caries does not significantly differ between using toothbrush and toothpaste and using alternative local tooth cleansing agents like chewing sticks [165]. Additionally, the evidence underscores that poor oral hygiene significantly poses a risk for the permanent dentition but not as significantly for the primary dentition.

These findings have empowered organizations like the Medical Women Association of Nigeria and the Nigeria Association of Paediatric Dentistry to actively engage with social media and collaborate with journalists in advocating for children's rights to oral health. I have actively participated in this social change agenda by creating weekly educational e-posters. These materials help to disseminate crucial information about the oral health of children and contribute to the broader effort to instigate positive social change in oral healthcare practices.

In addition, I have actively participated in translational research that played a pivotal role in shaping national policy documents addressing the healthcare needs of adolescents living with HIV. In collaboration with Rolake Odetoyingbo and Positive Action for Treatment Access, our research

endeavours included a comprehensive national study on the socio-developmental needs of adolescents living with HIV [166]. This collaborative effort yielded valuable evidence on the risk factors for HIV among adolescents [167, 168], uncovering insights such as rape as a risk factor for HIV among girls and sexually transmitted infections as a risk factor among boys [17, 18]. Our team organized a dissemination meeting to promote public discuss of our findings, highlighting the transformative impact of running adolescent HIV clinics.

The far-reaching impact of this extensive research became evident as it spurred a paradigm shift. Under the leadership of Prof John Idoko, the National Agency for the Control of AIDS developed the first policy document specifically focused on responding to adolescent HIV, promoting the establishment of dedicated adolescent HIV clinics. This marked a significant evolution, enabling a smoother transition for children living with HIV from paediatric clinics to adolescent clinics before transitioning to adult care. This shift contributed to improved retention rates of adolescents in HIV care. Although adolescent HIV clinic is now a routine practice today, it was not so in 2004 when we conduct these studies. We spurred a change through the sharing of evidence of the possible impact that separate care for adolescents can make to their adherence to HIV care.

Despite these advancements, the work on adolescents and HIV care is far from complete. The largest number of new infections is still being recorded in this population, necessitating ongoing efforts. Groups such as the I-TEST research team at the Nigerian Institute of Medical Research and YouthRise are actively exploring ways to enhance the HIV response among adolescents. I-TEST, for instance, collaborates with adolescents to devise solutions for improving HIV testing among this demographic [169-176]. YouthRise, in their research, showed that adolescents living with HIV in boarding schools face challenges in achieving viral load suppression, highlighting the need for targeted interventions.

Currently, I am conducting a study investigating prompt screening and diagnosis of oral diseases among children attending oral health clinics. Additionally, in collaboration with Nadia and Maha, my research partners, we are working on the HALOH project, which aims to explore effective referral pathways for children and adolescents living with HIV to receive appropriate care at oral health clinics. This multi-faceted research agenda reflects our ongoing commitment to advancing knowledge and practices in the field of adolescent healthcare, especially in the context of HIV. This piece of work makes me recall with nostalgia my efforts at working on HIV and oral health at the beginning of the pandemic. I recall presenting a paper titled: 'The Oral health implications in advocating for increased access to antiretroviral drugs by people living with AIDS' at the 1st National Conference on Oral Aspects of HIV/AIDS held at University of Ibadan Conference Centre, Ibadan, Nigeria on the 12th and 13th of February 2002. The session's Chairman retorted to my presentation in Yoruba '*baba njo an bere irugbon*' meaning a man is burning and we are asking for the beard. My paper was never discussed. I kept the will to study this relationship alive and generate the evidence. I am proud of the work by Modupe Coker of the Rutgers School of Dental Medicine in the USA, and her team at the University of Benin that I got a privilege to be part off. That research expounds on this evidence on the links between the HIV and oral health in children taking a deeper look at the role of the oral microbiome in the links between HIV and poor oral health in children. The will to do this work, nurtured since 2002 had led to the design of the HALOH project in 2023. Believe in your dreams!

My advocacy work in the field of adolescent health is also exemplified by the collaborative efforts with Prof KS Oyedeji of the Bioethics Society of Nigeria, Dr Sylvia Adebajo during her tenure at the Population Council, and Dr Araoye when he was Director at the Federal Ministry of Health, Nigeria. Together, we championed the development of guidelines aimed at reshaping the paradigm of sexual and reproductive health research in Nigeria. In 2014, following an extensive consultative process, the Federal Ministry of Health introduced guidelines that endorsed the conduct of non-invasive sexual and reproductive health research among adolescents aged 14 years and above without requiring parental consent. This decision was supported by research-based evidence, recognizing that adolescents aged 14 and above have developed cognitive abilities like adults though their psychosocial maturity is not developed until their 20s [177-180]. Adolescents, however, had a lower performance than adults on a facial emotion recognition task and they score lower on a self-reported measure of cognitive empathy [181]. The key distinction between adolescents and adults lie in their increased tendency to take risks, underscoring the ongoing need for parental guidance.

Beyond the advocacy work I have been engaged with in the field of adolescent health, it is crucial to gain a deeper understanding and implement improved strategies to enhance the sexual and reproductive health response among adolescents, which contributes to their current quality of life and ensures that they mature into healthy adults. The foundation for adolescents' future health is established during adolescence, emphasizing the importance of investing in their health development at this critical stage. I commend the work undertaken by SAYPHIN (Society for Adolescents and Young People's Health in Nigeria) under the leadership of Prof Adesegun Fatusi. The group has relentlessly advanced the adolescent health agenda in Nigeria. I am grateful for the opportunity to be part of his team, which, for the first time, integrated oral health issues into the 2020-2024 National Adolescent Health Policy, as evidenced in the 2023-2027 adolescent clinical care guidelines. This inclusion reflects a holistic approach to adolescent health, addressing not only reproductive health but also oral health, thereby comprehensively nurturing the well-being of this crucial demographic.

The convergence of science and advocacy for social change wields considerable influence. To achieve effectiveness in science, active engagement with stakeholders in the field is essential, facilitating the swift translation of scientific evidence into actionable initiatives. The HIV field has successfully implemented this approach, demonstrating its efficacy. However, the field of oral health must learn to adopt and adapt these practices, as translating scientific evidence into action is notably slower in this domain. Bridging this gap is imperative to accelerate progress and enhance the impact of scientific knowledge in the realm of oral health advocacy.

We must foster the development of additional researchers equipped with the skills to advocate for the accelerated translation of scientific findings into policies and programs. While research has the potential to impact policy [182], the current landscape suffers from knowledge creation and dissemination fragmentation, resulting in a weakened research body. This deficiency arises from inadequate emphasis on critical issues, leading to ineffective impact strategies [183]. Consequently, there is a pressing need for research to address authentic knowledge gaps throughout the entire research/policy interface, spanning from evidence generation to translation to practice. This gap in research translation affections national development. There are lots of research conducted to highlight problems. There are fewer research conducted to solve problems. This paradigm needs to change when we think of social impact research. It is more powerful when our research has context

relevance. Solve problems of human importance. Actively disseminate research results so that you make data available to people who can use the information to advocate for change. Simply organising webinars to disseminate research results can be strategic and powerful.

PART 4: Mentorship and Legacy Building

I will end my lecture with this mentorship and legacy building piece. No journey is complete without acknowledging the significance of mentorship and legacy building. I will reflect on the importance of nurturing the next generation of dental professionals and researchers, instilling in them technical skills and values of compassion, empathy, and community service. As I discuss the legacy we leave behind, I will ponder the impact of toothprints—small, yet significant imprints that mark the paths of those we touch.

Mentorship in dentistry transcends the simple transfer of knowledge; it evolves into a transformative journey that shapes individuals into comprehensive practitioners. This process involves guiding aspiring professionals through the intricate landscape of dental science while underscoring the ethical responsibilities inherent in the profession. The mentor-mentee relationship cultivates an environment where curiosity thrives, innovative thinking is fostered, and the fervour for oral health is ignited brightly.

However, embodying these attributes is no small feat, especially for those who have not previously traversed the path of mentorship. Our initial encounters with mentorship often occur within our social spheres—in families, among kinsfolk, and within communities. We draw inspiration from examples set by parents, cousins, aunties, uncles, and other role models we admire. These early mentorship experiences play a pivotal role in shaping who we become as mentors—whether as educators, supervisors, or collaborators on research or clinical teams.

In essence, mentorship is a continuum that begins with our personal encounters within familial and communal settings. These experiences serve as the foundation upon which we build our capacity to guide and inspire others in professional domains such as dentistry. Walking the path of mentorship involves imparting knowledge, instilling values, nurturing curiosity, and encouraging innovative thinking. It is a dynamic process that mirrors the mentor's journey and experiences, creating a reciprocal and enriching relationship between mentor and mentee.

As individuals progress in their careers within the dental field, the mantle of mentorship becomes a responsibility that extends beyond personal achievements. It becomes a commitment to contribute to developing and grooming the next generation of dental professionals. By embracing the lessons learned from our own mentors and integrating them into our approach, we ensure that mentorship in dentistry remains a powerful force for positive transformation, both in the lives of individuals and in the evolution of the dental profession.

I assumed the role of a mentor early in my career, as the formative years of my professional journey were marked by challenges that, while difficult to recount, have shaped my commitment to mentorship. Despite the hardships, I held steadfast for a singular purpose—to ensure those following in my footsteps would not endure the same hardship. I aimed to smooth their paths, which I pursued with unwavering determination. Although my success remained uncertain, I stood in the gaps, forging connections for young individuals and offering my skills to help colleagues secure support needed for their professional advancement.

A mutually beneficial exchange of skills characterises my collaboration with young research partners. While they contribute their unique expertise, I bring my narrative-writing skills to the table, allowing us to navigate the publication process together successfully and bringing valuable contributions to create new knowledge. Recognising the challenges I faced in learning manuscript writing, I initiated multiple programmes to facilitate accelerated learning on manuscript writing for others. Through these initiatives, I provide structured training to enable others to acquire, in a short time, the skills that took me years to develop.

In international research, I engage numerous young peers, negotiating favourable incomes for them. These opportunities, often beyond their competency to negotiate for, become accessible through my ability to leverage professional connections and maintain a reputation for integrity. In my manuscript writing endeavours, I strive to ensure that every contributor is appropriately reflected in the attribution. For me, the partnership transcends the act of paper writing; it is about cultivating friendships and constructing social networks.

I have initiated and facilitated several grant awards, demonstrating my commitment to supporting research and professional development. These grants include the Paediatric Dental Working Group Travel Bursaries by the International Association of Paediatric Dentistry, which has funded the travel of two persons each year for the last three biennial congresses and I have committed another fresh round of funds for two scholars each year for the next three congresses. Additionally, I have funded the International Association of Dental Research, Paediatric Oral Health Research Group's Paediatric Dentistry Working Group Travel Award for the last five years and I have committed funds for the next five years. Furthermore, I funded the Paediatric Dentistry Working Group Research award for three years until I stopped due to poor accountability by recipients. Moreover, I had won grants and sub-granted to others through the Oral Health Initiative, Nigerian Institute of Medical Research sub-grant awards leading to multiple publications by early career researchers in Scopus index journals. I believe that these grants have positively impacted the lives of the recipients, contributing to their academic and professional journeys.

In addition, my commitment extends to the annual Oral Health Initiative Boot Camp hosted by the Nigerian Institute of Medical Research, the annual IIAS-Science (Ife Institute for Advance Studies – Science) platform initiated by Prof Olupona, and more recently the early career researchers program initiated by Africa Oral Health Network. These initiatives serve as integral components of my efforts to leave lasting imprints, or "toothprints," in the lives of numerous individuals. By fostering opportunities for learning, research, and collaboration, I aspire to contribute to the growth and development of those within the academic and research communities. I aim to inspire and support individuals on their respective paths through these initiatives, leaving a meaningful and enduring impact.

Recognising the importance of social networks, I actively contribute to legacy building through these connections. By fostering a collaborative environment where individuals feel valued, and integral to the collective effort, I aim to create a lasting impact beyond the written word, nurturing a sense of camaraderie and shared purpose within the academic and professional community.

At this point, I would like to acknowledge my mentors and those who created social networks for me. I remember Prof Odusanya today. He may be surprised that I list him as a professional mentor.

Those words were not used in those days. A mentor he was. He taught me to strive for excellence and nothing but excellence. He taught me critical thinking and reasoning. I am also grateful to my sister, friend, and mentor, Prof Olawunmi Fatusi, the mother hen. She has fought in my struggles beyond what I have ever fought for myself. Thanks to Abigail Harrison who introduced me to adolescent sexual and reproductive health research, facilitated my studies at Brown University, Rhodes Island, USA, and continues to be a support for me and my mentees.

I am grateful for my social network, the academic and non-academic staff at the Faculty of Dentistry and the Obafemi Awolowo University, and the many in the College of Health Sciences who have turned from peers to family and friends too numerous to mention, and my family at the Central Office of Research who help turn dreams into realities.

My family and friends have brought me this far. I recognise my aunties and uncles were daddy and mummy until I grew old enough in my university to realise, I should have one daddy and mummy. My siblings and cousins who have all rolled into one with no distinctions. I recognise Folabi and Bolaji whose gentleness and goodness have contributed to my success. My precious children turned into beautiful adults – Motoy, Ayomi and Iniboy - who indulged me to be the permanent friend of the computer during my early career years. My adopted children – Dare, Nonye, Papa – thanks for increasing my support network. My twin sister – Munirat Ogunlayi who has kept my feet on the path of truth. My prayer partner to whom I am ever grateful – Mrs Omisola. I also recognise my ever-growing family that has emerged over my almost 40 years in Ile-Ife – each one of you are precious and special. I am eternally grateful. Most of all, my first ever mentor - my mother - from whom I learnt the value of family, truth, hard work, and respect.

I am grateful to my supervisees, who allowed me to tutor them. My success stories in the field of Peadiatric Dentistry that I lay direct claim too are Elizabeth Oziegbe, Titus Oyedele, Nneka Chukwumah, Nneka Onyejaka, and Micheal Alade. I classify Drs Arowolo, Afolabi and Chinelo Okafor as grand mentees as they were ‘born’ by Elizabeth Oziegbe. Thanks to the numerous mentees on the manuscript writing hub and my very own female mentees – Drs Mary Obiyan and Omolola Alade, and male mentee – Qudus Lawal. I acknowledge the many (un)knowns I have inspired, like Prof Okonji Nweala, Prof Bisi Aina, Prof (Mrs) Omigbodun and Prof Sade Ogunsola had unknowingly inspired me. I am grateful for the wealth you all are to me. I am sure my adolescent health mentor, Prof Abigail Harrison, would be proud of the arts of me she co-created. You are my social capital.

In dentistry, I recognise that legacy building goes beyond personal achievements—it's about leaving an indelible mark on the profession and the lives touched by it. As dental professionals, we are architects of smiles and guardians of oral well-being. However, our impact extends far beyond clinical expertise. It reverberates in the values we instill, the lessons we impart, and the inspiration we provide to those who follow in our footsteps.

Reflecting on the legacy we leave behind prompts contemplation on the concept of "toothprints." Just as fingerprints are unique identifiers, toothprints symbolize the imprints we make on the paths of those we touch as dentists. These imprints may seem small in the grand tapestry of dental history, but their significance lies in their lasting effect. They represent the lives transformed, the knowledge passed on, and the commitment to service ingrained in the fabric of the dental community.

I feel confident that my years of clinical work are driven by the fusion of empathy, humanness, culture, the recognition of health as a right and the understanding that the children in my hands are God-given opportunities to mould a healthy future. I may have left imprints – positive toothprints – in the sands of their lives. I have handled children in my clinical care with warmth, affection, and respect. Like my teammate, we recognise the future we are opportune to build through the dental pathways and we do not take them for granted. I recall very well the story of a young patient who regularly removed her tooth fillings because she wanted to come back to our dental clinic. That was a most touching story but a testament to the impact the quality of care we provide truly is.

I am confident that my research work, infused with a sense of social responsibility and shaped by the desire for social networking less so for amassing many publications, may have helped shape society for good in ways that improved people's lives. I feel confident that my advocacy work has added a little extra to getting us to the utopian world we dream of and aspire for. I continue to aspire to work towards this dream world by leaving no stones I see in my dreams untouched.

Early in my childhood, I heard the phrase – the grave is the wealthiest place because many unfulfilled brilliant dreams lie there. As a child, that phrase inspired me not to be counted among the list of grave enrichers. I follow my dreams. I fall often but get up, learning not to fall again when taking that route. Of course, I fall many times on some routes, but I am strong enough to realise it is not the number of falls that matters but the number of times I get up when I fall. I teach these lessons by mentoring. In mentoring the next generation, we become custodians of the profession's continuity. Sharing our experiences, knowledge, and values contributes to a legacy that transcends individual achievements. Our ‘toothprints’, metaphorical imprints of our influence, become part of a collective narrative that shapes the future of dentistry.

As I conclude this discourse, I charge us to embrace the responsibility of mentorship and legacy building with humility and dedication. Let our footprints not only mark the sands of time but also pave the way for a dental community characterised by excellence, compassion, and a shared commitment to advancing oral health for generations to come. I recognise that as non-dentists, you can actively contribute to shaping that dental community and thereby, leave toothprints in the sands of time.

PART 5: What Next?

Mr Vice Chancellor sir, my research has opened new avenues for further exploration in various domains. These include the potential for conducting ecological studies to formulate hypotheses regarding the relationships between different variables that may have impact on the prevention and control of disease entities, conducting primary studies to investigate the connections between macro-level variables and early childhood caries as an example of an oral disease, and building evidence on optimal strategies for integrating oral, mental, sexual, and reproductive health through the conduct of implementation science. Additionally, there is a need to develop models for the seamless integration of oral health into broader healthcare practices through the conduct of translational research to strengthen national, regional, and international policies. We can generate evidence for addressing gender and social inequalities that contribute to the vulnerability of certain populations to oral diseases. This is a pressing issue, and contextual evidence is needed to improve the health and well-being of populations vulnerable to oral diseases one of which are adolescents, and another are pregnant women.

However, these efforts represent only a fraction of what is needed from every researcher who possess the expertise to generate evidence for actionable interventions. Regardless of our area of specialization, we can leverage our knowledge to promote health and wellness at various levels, from individual to global. We can leave a lasting impact on individuals, families, communities, nations, and societies. Together, we can make significant contributions to shaping a healthier future for all, leaving our mark on the sands of time.

As researchers, we are boundless. Our skills are not meant to keep us in the box. Our skills should help those in the box to find their way out of it. My story is that of toothprints transversing the field of bioethics, adolescent health, mental health, communicable diseases like HIV, Ebola, and COVID-19, as well as policy and national strategic thinking. It's about using research skills wherever it is needed. I have demonstrated the possible versality potentials of a researcher through my history of engagement with research, advocacy, policy formulations, programs development at national, regional, and international levels with a focus on population studies. Nigeria has myriads of problems that need to be sorted using multifaceted responses.

As I move into the future, I intend to serve as the proverbial donkey looking forward to being ridden by many early career researchers. I would like to see a future where there is a lot more fusion of social science and arts into the study of oral health problems. I would like to support the younger generation of researchers to conduct implementation science focused oral health research that generates evidence on models of implementation of integrated oral health research for scale up. I dream of an oral health research study centre hosted by the Faculty of Dentistry, Obafemi Awolowo University Ile-Ife, that can generate evidence to drive national oral health policy implementation. I look forward to a future where the field of oral health in Africa evolves from the pieces of work I currently do. I hope my work will provide data for modelling studies that enables oral health economists to identify micro-level regions and populations that interventions can help to improve their oral health and wellbeing. I aspire to see my mentees become policy makers who diligently respond to the needs of the citizens rather than be distracted with the need to enrich their pockets and

bank account. I look forward to retiring in the next 13 years by God's grace, assured that I am leaving behind a crop of young scholars who can successfully handle the business of research-evidence generation that contributes significantly to global health.

Conclusion

In conclusion, "Leaving Toothprints in the Sands of Time" is not merely a reflection of my personal journey but an invitation to each of you to consider the profound influence we can have when we merge the realms of science and arts, community engagement, and advocacy for social change. Together, we can continue to shape a future where our contributions, like the toothprints I have left in the sands of time, endure, and inspire generations to come.

Your footprints can leave lasting imprints on the evolving landscape of science, art, community engagement, and social advocacy. Each of us possesses the power to contribute to a collective legacy that transcends individual accomplishments. By weaving together the threads of our unique skills, insights, and passions, we can forge a path towards a more enlightened and equitable future. Your footprints can leave an indelible mark, contributing to the ongoing narrative of progress, compassion, and positive change. Let our combined efforts create a tapestry of influence that resonates through time, inspiring and guiding those who follow in our footsteps.

At the end of it all, like the many who have followed in the footprints of the Grand Master, the Lord Almighty, and made a success of their profession and their race in Christ, may He take all the Glory as we leave the replica of His footprints in the sands of the lives of men.

Thanks for your attention.

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