SINGLE-HANDED DENTISTRY

2004/2005 University of Ibadan
Inaugural Lecture Series

Delivered on Behalf of The Faculty of Dentistry
College of Medicine,
University of Ibadan

By

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Faculty of Education Lecture Theatre
University of Ibadan

The Vice Chancellor,
Deputy Vice-Chancellor (Administration),
Deputy Vice Chancellor (Academic),
The Registrar,
The Bursar,
The Librarian,
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Dean of Postgraduate School and Dean of Students,
Directors of Institutes,
Heads of Departments,
Distinguished Colleagues and Guests,
Distinguished students,
Gentlemen of the Press,
Ladies and Gentlemen,

I sat across the desk from him, speechless and unable to meet the questioning look on the face of the uniformed gentleman. The brilliance of the sunlight streaming into my office that mid morning could not lighten the weight of the bombshell I was about to drop.

> "Sir, they said you have to leave now" I finally blurted out.
> "They said that your appointment has not been concluded. You are not supposed to be teaching yet".
> At that point, the dam holding back the flood of emotions gave way and tears rolled down my cheeks.

The incident I now recount was merely the beginning of a particularly turbulent time in my career. It did not end there. But at some point in the midst of that storm, I prayed, "God let me live to tell this story". That prayer is being answered today in a way I did not imagine when I silently sent a message to heaven.

It is indeed a great honour for me to be nominated to deliver this inaugural lecture in the 2004/2005 series, on behalf of the Faculty of Dentistry. Professor J.O. Daramola, an Oral and Maxillofacial surgeon delivered the first inaugural lecture from Dentistry, on January 28, 1988. That was 17years ago. The second lecture was delivered by Professor A.E Obiechina, also on Oral and Maxillofacial Surgery on December 18, 2003. It is therefore with pleasure that I give this inaugural lecture, the third in Dentistry, and first in the Department of Preventive Dentistry.

Mr. Vice Chancellor, Sir! You ask, I imagine "Why the choice of the title – Single-handed Dentistry", when dating as far back as the 1880s, the dental profession had been practicing and actively promoting four-handed dentistry.

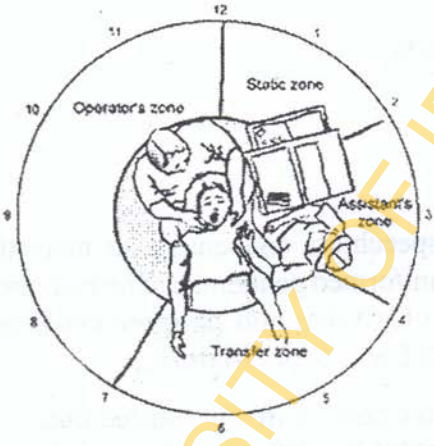


Fig. 1a: Field of operation in Four-Handed Dentistry. Left-handed operator.
Source: Finkbeiner, 2000[1]

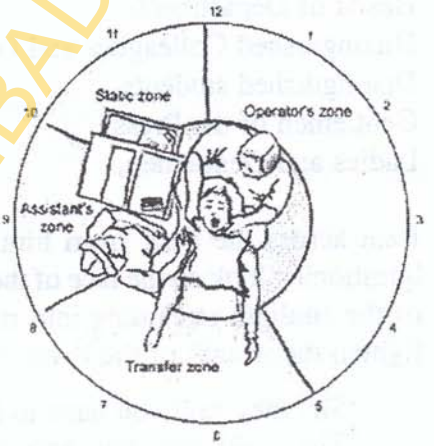


Fig. 1b: Field of operation in Four-Handed Dentistry. Right-handed operator.
Source: Finkbeiner, 2000[1]

Four-handed dentistry is a team approach where highly skilled individuals work together in an ergonometrically designed environment to improve the productivity of the dental team, improve the quality of

care for dental patients, while protecting the physical well-being of the operating team[1] (Fig. 1 a &b). Four- handed dentistry is the combination of the pair of hands of the dentist and those of his chair-side assistant. A publication in the British Dental Journal of January 16, 1951 [2] stated that the use of an efficient chair-side assistant could save the dentist a great deal of time and unnecessary work.

Still in pursuit of greater efficiency, the practice of six-handed dentistry gained popular acceptance from about the late 1960's. A three-man team approach was developed to further increase efficiency in oral rehabilitation with patients under general anaethesia[5].

In order to adequately comment on the subject, literature search on two-handed dentistry was made. Contrary to expectation, the exercise yielded only one article that is remotely related to the subject. Since no dentist is expected to practice without the assistance of an ancillary staff, this terminology is seldom employed.

If two-handed dentistry proved such a rarity, it would therefore seem illogical and a waste of precious man-hour to embark on literature search on single-handed dentistry. There was bound to be none. With the keen interest I had developed on the subject and having had the privilege of visiting some of the world's most advanced centres for prosthetics and orthotics, I would have known before now if it ever existed. To my utter amazement, six publications were returned in response to the appropriate search words. It turned out, however, that in all six cases, single-handed dentistry was a term employed to distinguish a dental practitioner who is in solo-practice from one in partnership or group practice.

"Single-handed dentistry" as will be revealed in the course of this lecture, succinctly captures, in more ways than one; in more ways than the obvious, different facets and events in my life. For the first time, I choose to give a little insight into the thought processes, everyday living and experiences of a person living in dignity with an obvious physical challenge. On another plane, "single-handed dentistry" addresses experiences in clinical practice and dentistry as a career. On yet another level, the title of the lecture gives briefs on my administrative experiences at the School of Dentistry, University of Ibadan, Nigeria.

Single-Handed Existence

On December 7, 1979 I received an above elbow amputation of my left arm, following crush injuries sustained in an accident in a commercial Peugeot 504 station wagon on the Lagos-Ibadan expressway. It may not be irrelevant to say that I received no compensation but from then on, my life took a new course! But did it really? – I have received the grace to carry on and carry through, without much in the way of deflection, virtually everything I had set to do at that time and much more.

Without knowing it, the words of Nietzsche (1888) in "Maxims and missiles" have been my watchword.

" That which does not kill me, makes me stronger"

Living in the aftermath of the accident entailed learning to do the same things in a different way. A physical handicap challenges the imagination, stretches you a little beyond the ordinary. One has thus learned to be innovative in all things.

Single-Handed Dental Career

Clinical Practice

Numerous ailing teeth have received another lease of life through fillings that I placed successfully. Many others were extracted in order to relieve their owners of intractable pain. I cannot today count the number of persons that have walked out of my clinic with smiles on their faces, having been provided with dentures to replace missing teeth nor how many smiles have been brightened through a good scaling and polishing.

Even though I am not a trained Paedodontist, I derived the greatest delight in running the Children's clinic under my boss and mentor, Dr Moronke Noah. I recall clearly my posting to the prosthetics clinic during housemanship. Dr S.H Chedda, a seasoned Dental Officer, was rather apprehensive about my ability to discharge my duties in that clinic. She however breathed a sigh of relief when I trimmed and delivered my first partial denture – single-handedly!

Prevention in Dentistry

Dentistry is the science and art of preventing and treating diseases and conditions of the oral cavity and the maxillofacial complex. While oral health has been recognized as an important part of general health, in developing countries and Nigeria, less priority is accorded this discipline.

Escalating prevalence of dental caries has been reported in some developing countries[6-9], this being the result of changing diet and snacking habits. Similarly, the severity of periodontal diseases continues to be high. Furthermore, delay in diagnosis and treatment of diseases such as acute necrotising ulcerative gingivitis (ANUG) and oral cancers result in severe tissue damage and sometimes death. [10-13]

It has repeatedly been stressed that treating diseases as they occur is less effective in that it causes the individual great discomfort, pain, disability days and the society huge financial losses through having to provide costly restorative and rehabilitative facilities.

Preventing disease occurrence principally through raising awareness about oral health would therefore seem the most logical strategy in the circumstance. Many diseases of the oral cavity can be completely prevented or effectively treated if detected early. The application of sound principles of preventive dentistry on a community-wide basis is required.

Prevention of Dental Caries

Dental caries is one of the commonest diseases afflicting the human race and it is a major cause of premature tooth loss in many communities. Dental caries has now been found to be reversible to some extent in the presence of fluoride and other essential minerals like calcium and phosphates [14]. Untreated tooth decay progresses to enamel and dentine breakdown and to the opening up of the pulp to bacterial infection (Fig 2). On rare occasions, death has resulted from infected carious lesions.

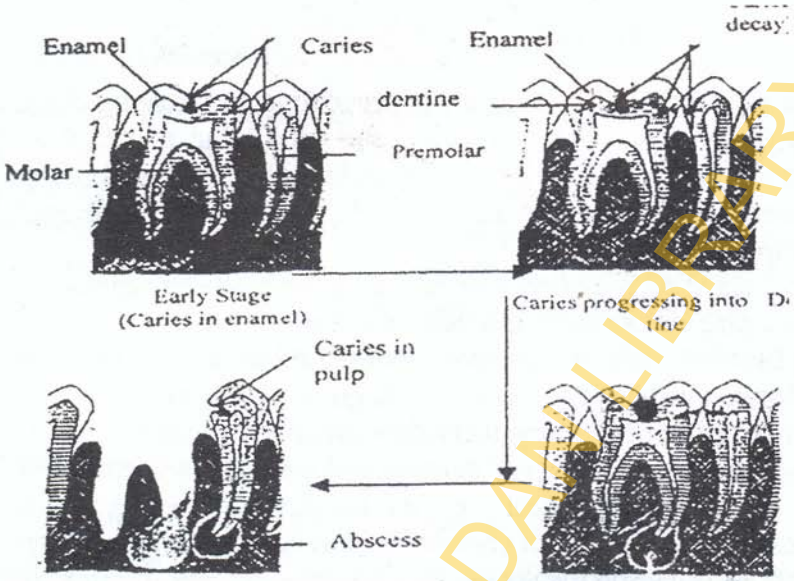


Fig. 2: Process of tooth decay through enamel to dentine and pulp.
Source: Aderinokun (2000) [34]

Though different aetiological hypotheses have been put forward, it is generally accepted that dental caries develops only in the presence of four interacting variables, which are; acidogenic bacteria in plaque, ingestion of carbohydrates, particularly refined sugars, the tooth integrity and time [14]

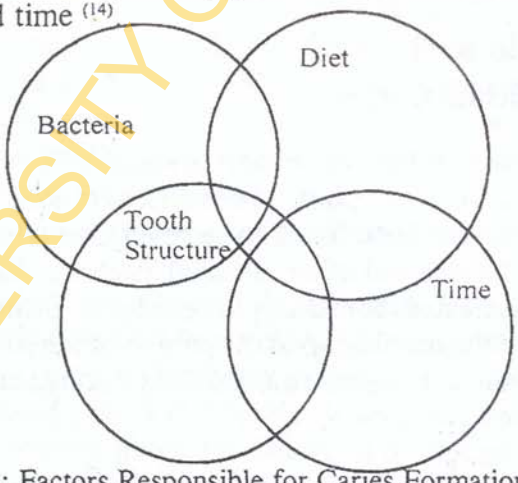


Fig 3: Factors Responsible for Caries Formation

Caries prevention strategies can thus be derived from elimination or reduction of one or more of these contributory factors. Preliminary data (Unpublished) on the dietary habits of children from different socio-economic strata in Ibadan has revealed high frequency of sugar consumption across all strata. This is a matter requiring immediate health educational intervention as well as partnership with school authorities in checking the sale of sugary foods in the vicinity of schools.

Prevention of Periodontal Disease

Chronic periodontal disease is an inflammatory pathological process affecting the periodontal tissues and it is one of the commonest diseases in human populations. Accumulation of bacterial plaque at gingival margins triggers off an inflammatory response and leads to the establishment of gingivitis. If sufficiently long-standing, destruction of the supporting tissues sets in (Fig 4).

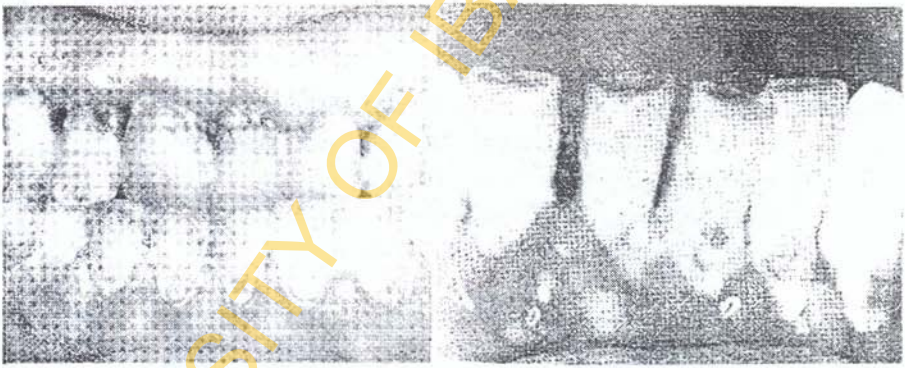


Fig 4: Chronic Periodontitis Following Untreated Chronic Gingivitis

Prevention of periodontal disease is mainly by regular plaque removal. This is the responsibility of the individual although professional measures are occasionally required to make such efforts more effective.

In the course of establishing baseline data for the Idikan community, Aderinokun and Akande [15], found the oral hygiene and periodontal health of the children to be particularly poor. Furthermore, a survey of the attitudes and practices of our people within the commu-

nities has revealed a number of negative perceptions that may have contributed to the severity of periodontal disease recorded. For instance, the local name for chronic periodontitis is *Akokoro* and this is believed to be hereditary or to be "a thing of the blood". Again, rather than striving to achieve good oral hygiene through meticulous plaque removal, some Nigerians are in the habit of using herbal preparations, potash, battery water, black native soap and numerous others on teeth either as prophylactic or therapeutic remedies.

Realizing that good oral hygiene is fundamental to the health of the gums and by inference the longevity of the teeth, Aderinokun, Oyemade and Oladepo (2001) [16], set out to develop appropriate health education package for school children and adults within the community. The School Health Education project included songs, demonstrations, posters (Fig 5b) and art competitions, all of which were conducted by the teachers after a Training-of-Trainers had been conducted by us. The adult-targeted intervention involved awareness creation through the use of photo-posters (Fig 5a) of identifiable role models within the community. Structured evaluation of these approaches has indicated high degrees of effectiveness both for the immediate population with tremendous potentials for its replication in similar population groups across the nation.

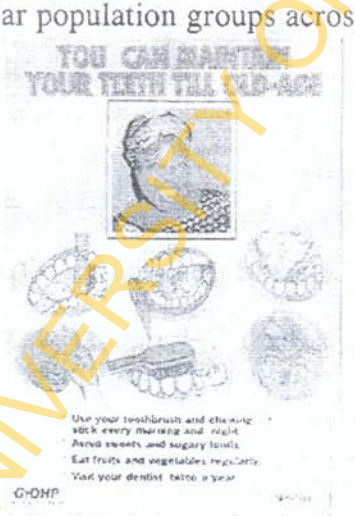


Fig 5a & b: Some of the Posters produced in response to the Poor Oral Hygiene status of adults and children in Idikan, Ibadan.

Chewing sticks and Oral Health

Another aspect of our research efforts within the community is the investigation on chewing stick because a high proportion of our population utilizes the chewing stick in routine oral hygiene procedure. Almost two-thirds (37.8%) of school children in Yemetu, a traditional part of Ibadan city admitted using chewing stick on regular basis [17]. Aderinokun et. al., (1999) [18] assessed the effectiveness of two commonly used chewing sticks on the health of the gums. In a controlled cohort study among Idikan school children, *Orin ayan* (Distethemathus benthamianus) was found to exhibit greater ability to improve gingival health, relative to *Orin Ijebu* (Massularia acuminata) and toothbrush. This in a way would tend to validate claims to the high potency of the particular wood stick by the natives.

Beliefs about Eruption Sequence and Difficulties

Superstitions have always trailed the occurrence of teeth in the mouth of newly born babies. The condition has variously been associated with good or bad omen [19, 20]. Natal teeth are teeth present in the mouth at birth, whilst neonatal teeth are those teeth that erupt during the first thirty days after birth. Its incidence as reported in other parts of the world is between 1 in 2,000 and 1 in 3,667 live births. Aderinokun and Onadeko[21] (Fig 6) and Denloye and Aderinokun [22] documented at various times, cases of neonatal teeth in Nigerian babies and in different locations in the mouth.

Fig. 6: Neonatal Teeth in a 14-day-old baby [21]

Thereafter, Aderinokun and Oyejide[23, 24] investigated societal opinion on babies born with teeth in the mouth as well as the eruption of upper milk teeth ahead of the lower. This revealed that Yorubas still continue to stigmatize such children and their families. Although dental practice dictates that the teeth be preserved in the mouth because they usually belong to the normal deciduous series, the authors advocate the adoption of a Transcultural Approach wherein the professional comply with the parents' wish to extract the teeth. Thereafter, a space maintainer may be placed in the position of the extracted teeth pending the eruption of the permanent teeth.

Teething Myths

Teething has been erroneously held responsible for a wide variety of childhood illnesses. There are references to teething difficulties from around 1200 BC. In the fourth century BC, Hippocrates wrote a short treatise on dentition [25]:

> "Teething children suffer from itching of the gums, fevers, convulsion and diarrhoea, especially when they cut their eye teeth and when they are very corpulent and costive–"

There is also a recorded cure from the forth century AD [25].

> " If they are in pain, smear gums with dog's milk or hare's brain, this works also if eaten—".

Even in this twenty first century, the beliefs about teething have not changed much. In an attempt to prevent or treat the uncountable symptoms attributed to the eruption of teeth in babies, Oyejide and Aderinokun [26], found that our people resort to some unusual practices, like washing babies head with concoctions and the wearing of amulets, among others. The danger inherent in the persistence of this belief is that signs of serious systemic diseases may be ignored because they are viewed merely as part of teething and this could have fatal consequences.

Since there is empirical evidence to the effect that teething is a natural physiological process similar to growing our nails, we set about correcting some of these misconceptions about teething. This

was realized, in collaboration with the WHO in the design, distribution and use of a photo-poster on the subject among different target populations and ethnic groups (Fig. 7).

The impact of this health educational tool on the practices of nurses has been studied and reported by Bankole, Denloye, Aderinokun and Badejo (2002-2003) [27, 28].

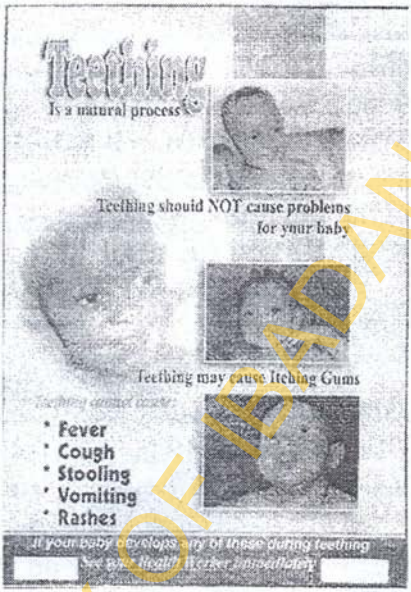


Fig 7: Poster Developed in Collaboration with the World Health Organization to enlighten on the Teething Process. Prepared in the three major languages and Distributed to all parts of Nigeria

Prevention of Tetracycline Staining of Teeth

The staining effect of tetracycline antibiotic on teeth had been known since 1956. Health care practitioners are often reminded of the need to find substitutes for the tetracyclines during antenatal period or in children before the age of twelve years. This is in order to save children and the society from the future burden of discouloured teeth especially in low-socioeconomic groups where the cost of cosmetic treatment on the teeth could be unaffordable. Despite the state of knowledge

however, it was surprising to notice that many residents of our community had these stains.

A survey to determine the prevalence of tetracycline staining of teeth in school children in Idikan, Ibadan in 1991 revealed that approximately 40% of the 12-year old children had stains derived from ingesting this antibiotic.[29] Simultaneously, the harmful practice of using prescription drugs indiscriminately was uncovered. While the high prevalence of tetracycline stains has cosmetic significance, the underlying systemic consequences should be of more concern. Instituting the provision of affordable and accessible health care facilities and encouraging its optimal utilization can prevent indiscriminate drug use.

Recognizing that awareness creation could also be a useful strategy, we set about to develop an Information, Education and Communication (IEC) tool in the form of posters for different ethnic groups in Nigeria.

Developing Primary Oral Health Care

As the pioneer staff in Community Oral Health, College of Medicine, the responsibility for developing a comprehensive curriculum for the teaching of the subject rested squarely on my shoulders. With guidance from Professor S.O. Jeboda, who was then the only lecturer in Community Dentistry in Nigeria, I was able to draw up the schedule of lectures. What proved to be more of a challenge however was developing the community programme and setting up a practice site.

The community programme set out to fulfill the following objectives;

- Providing a means of awareness creation among the people,
- Establishing database on the people's knowledge, practices and oral diseases.
- Providing a location for easily accessible and sustainable oral care services.

With a task as this on hand, it was only logical to begin from first principle. Central to the practice of dentistry has always been the dental chair. It would therefore seem that when considering any dental programme, the issue of providing the dental chair should be fore-

most. This must have inspired my initiative in designing a low-cost, locally made dental chair - the RASANO 587, as it was christened. The chair was of a simple design, which borrowed from existing technologies, pieced together to satisfy the basic requirements for adjustability, maneuverability as well as patient and operator comfort. The RASANO 587 (Fig. 8) was exhibited at the National Conference of the Nigerian Dental Association held at the Conference Centre of the University of Ibadan in May 1987. Because of the interest it generated and the encouragement that trailed the RASANO 587, the RASANO 1087, which is an improvement on the former, was born in October 1987 and published in the Tropical Dental Journal [30].

Fig 8: The Locally fabricated RASANO 587 on display

Fig 9: The RASANO 1087 which has been in use in Idikan since 1990

Next came the burning compulsion to put the chair to use - if only to buttress the claim that it is truly the answer to community dental practice in Nigeria. This was realized in the establishment of the Community Dental Programme in Idikan in 1987 (Fig. 9), the very first community or rural dental clinic in Nigeria. There, the RASANO 1087 was installed and put to practical use. It has also been

produced for use in a number of government and privately owned dental clinics across the nation and the programme in Idikan has been replicated in Itesiwaju LGA of Oyo state.

It is remarkable that the Idikan dental programme, which started in one back room, now occupies an envious location. The programme has similarly attracted a few modest grants.

It is also worthy of note that simple as it may appear, the clinic has played host to dignitaries from local and international development agencies, chiefly for the uniqueness of the initiative.

In recognition of its novelty and the potential role it could play in Primary Health Care in Nigeria, I was awarded in 1990 the Fellowship of the Ashoka, Innovators for the Public. An international organization, Ashoka, scouts for and provides financial and capacity building support for a distinct group of people tagged-Public Entrepreneurs, to enable them actualize the laudable projects they initiate for the advancement of their societies.

Developing Training Protocol for Community Health Workers on Oral Health

It has been correctly reasoned that oral health problems in developing countries cannot be solved solely by dentists because they are too few in number and are based only in the urban centers [31].

It has thus been suggested that tasks should be delegated to other health care workers. In pursuance of this philosophy, two broad approaches are often employed. The first is to train specific personnel for the purpose of health care delivery.

In the second approach, other health care providers are given trainings which will enable them provide, in addition to their primary assignments, basic oral health services. This is well exemplified by training of medical students in Oman to carry out tooth extractions on graduation [32] and Medical Aides in Tanzania [33], who are trained to provide emergency dental care services.

In the light of this understanding, Aderinokun (2000) [34] set out todevelop a training protocol for Community Health Care Workers in Nigeria using Flow Charts (Fig. 10). This innovative method, based

on the use of diagrams, was conceptualized from the approach adopted in the control of sexually transmitted diseases in developing countries where laboratory facilities are lacking [35].

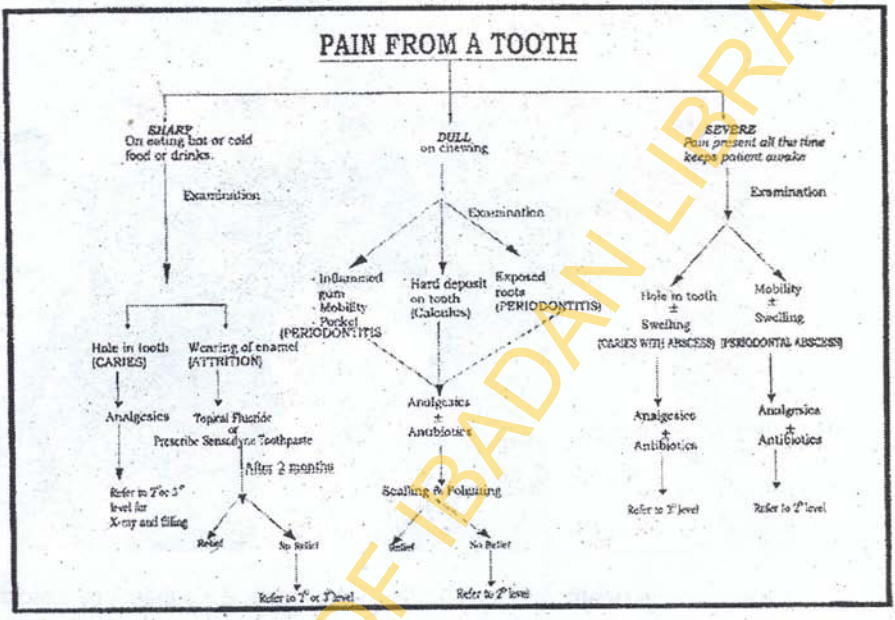


Fig 10: Example of Flow Charts for use by community Health Workers:

Armed with this very useful tool, successive groups of Community Health Workers have been trained with phenomenal interest stimulated. Evaluation of the training has similarly yielded impressive results. Similarly, the working manual of different cadres of community health workers – "The Standing Orders" – has similarly been reviewed to include the essential components of oral health using this principle.

Training of Community Health Workers for the Prevention of Noma

Cancrum oris, also known as noma is a devastating infection, which destroys oral soft and hard tissues. It is a public health problem in developing countries especially in sub Saharan Africa (Fig. 12).

Fig. 11: Community Health Workers at the Tulsi Chanrai Foundation, Eniosa. Author (Sitting Second left), Author's daughter (sitting second right), Mrs. C. O. Badejo (centre).

It usually affects children under six years and it is estimated to affect between one and seven cases per 1000 and may be as high as 12 per 1000 in highly endemic communities. As many as 100,000 new infections occur every year. Malnutrition, childhood illnesses such as measles and malaria are the major predisposing factors in noma.

Whilst there has been a drastic decline in the incidence of the disease in the southern parts of Nigeria, corresponding to the increased immunization coverage, the incidence in some parts of northern Nigeria has been on the increase (Fig. 13)

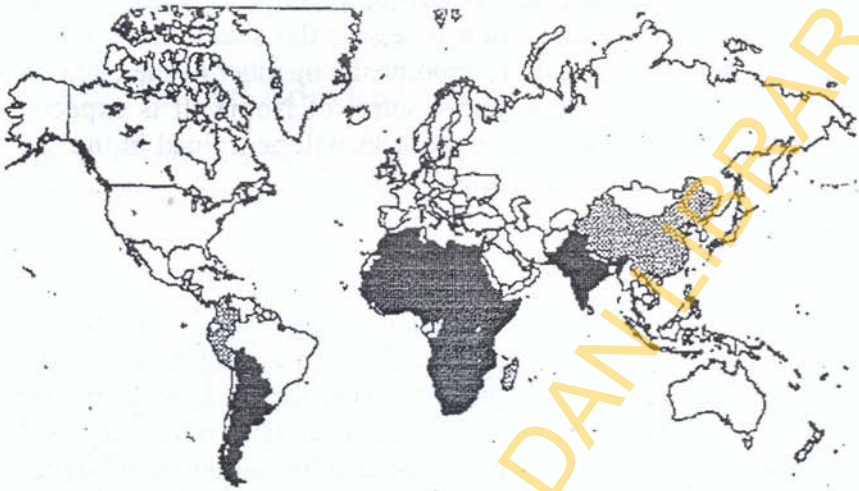
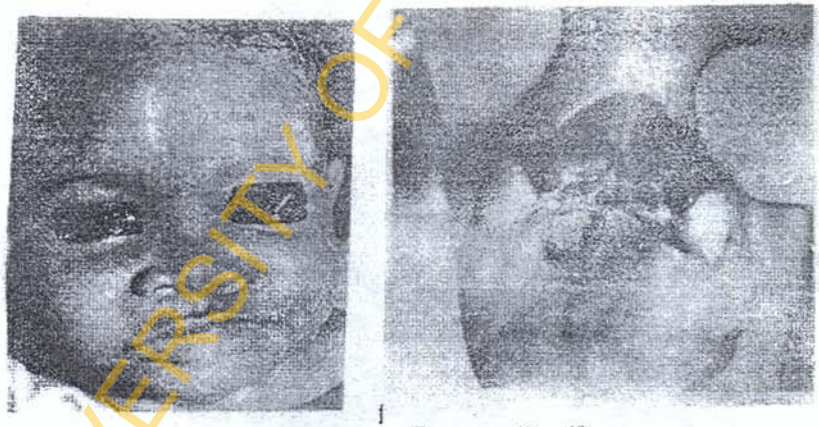


Fig. 12: World Map Showing the Distribution of Noma
Source: Tropical Medicine & International Health



Even though it can be severely devastating, the disease is preventable and easily cured if appropriate treatment is instituted early in the disease process. Training of health care workers especially at the grassroots should greatly improve reach and effective intervention.

In recognition of the possibilities imbued in the training protocol earlier described, I was invited to be part of the Expert Working Group of the World Health Organization to assess the situation in Sokoto State in 2002 and was thereafter, appointed a member of the National Committee for the Prevention and Control of Noma. It is expected that community and village health workers will be trained in the recognition and early treatment of the disease.

HIV/AIDS and Dentistry

Manifestations of Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) often appear in the oral cavity. These usually occur early in the infection when there might be no other signs. Oral lesions commonly associated with HIV have been well documented in other parts of the world but Information from Nigeria has been sparse, in spite of the relatively high prevalence of the infection. Adurogbangba, Aderinokun, Odaibo et al., (2004)[36] investigated and reported common oral lesions among HIV positive persons in Oyo state, Nigeria. Pseudomembranous candidiasis and angular cheilitis were found to occur significantly and more frequently in HIV infection (Fig. 14).

Fig. 14: Pseudomembranous Candidiasis and Angular Cheilitis in an HIV positive Nigerian female[36]

There was also a statistically lower CD4+ count in persons with oral lesions, indicating that occurrence of oral lesions may signify lowering of immune status in HIV infection.

Single-Handed Administration

The dentistry programme at the University of Ibadan began in 1975 with four academic members of staff. For many years thereafter, these few lecturers diligently kept the programme going by teaching all the subjects, irrespective of their specialties. For instance, operative technique, was taught by the duo of Professor Henry Ajagbe and Dr Moronke Noah neither of whom specialized in that field. In the same way, Dr Kulasekara, a periodontologist, summarized the whole of Community Dentistry in one or two lectures, usually towards the final examinations.

Later on, the staff strength gradually improved, boosted by the return of staff that benefited from the staff development plan. By the 1986-87 session, there were twelve lecturers and two dental technologists in dentistry.

In retrospect, it is interesting to note that in virtually all cases, a uniform expression was employed in making the request for leave. You needed no soothsayer to predict that the content of the letter would read thus;

> "On compassionate grounds, I seek to utilize the remainder of my 1989 annual leave after which my leave of absence will commence".

And so, my teachers, senior colleagues and colleagues left one by one until at some point in time, I became the only academic member of staff on ground in the Dental Programme.

That was how, at a very tender and delicate stage in my career, I started to hold position of responsibility for which I was ill-equipped. Not counting the period before promotion to senior lecturer when I was merely overseeing, I have been appointed Acting Head of Preventive Dentistry for a total of ten years.

Concurrently, I was the Sub Dean (Dentistry) of the Faculty of Clinical Sciences and Dentistry, serving under Professor G. T. Ijaduola and Professor A.O. Adebo, Deans of the Faculty in that order.

It was while I was still very green in the disproportionate roles I had assumed that the incident I recounted at the beginning of this lecture took place.

On leaving, Dr. Noah had mandated me to arrange for the teaching of hardship areas by soliciting assistance of capable hands outside the confines of the University of Ibadan. As a dutiful and obedient servant, no sooner had she left than I embarked on the first in the series of the salvaging missions. I had to make the trips to Lagos for this was the period when a Federal Minister had informed Nigerians that telephones were not for the poor and when lecturers' take-home pay took them no further than the gates of the ivory towers.

Seeing the zeal with which I sought him out, the gentleman in question, Lt Col Adeyemi of the Army Medical Corps, then serving in Yaba, acceded to our request. So before his appointment could clear all the red tapes, Dr. Adeyemi suddenly arrived one morning. It took the fatherly intervention of the Dean, then Prof. Bisi Odejide and the administrative competence of the Faculty Officer, Mrs. Moji Ladipo, to sort out the mix-up that ensued.

Another notable challenge encountered in the course of holding fort single-handedly was the saga accompanying the re-accreditation of one of our postgraduate programmes. The accreditation team, led by Prof. Frank Okoisor arrived on the day of the Induction Ceremony of the fresh MBBS and BDS graduates, where as Sub Dean (Dentistry), I was to introduce the guest of honour. We had barely got through the task, when we were alerted to the arrival of the visitation team at the Dental School. In the split second it took for me to get back, the team had left. The deed was done! The accreditation for postgraduate training towards Fellowship of the National Postgraduate College of Dental Surgery had been withdrawn!!

Having lost accreditation for the postgraduate training, survival of the dental programme was hanging on a very delicate string. It was at this time that Professor A.B.O.O. Oyediran, having recently assumed office as Vice-Chancellor, came on a familiarization visit to the dental school. Naturally, the Provost, Professor Babatunde Osotimehin and the Dean, Professor Adebo, accompanied him. I do not clearly remember what exactly spurred my action. Desperate in-

stinct to survive perhaps, but Mrs Enitan Famewo continues to tell the story to this day of how I became extraordinarily eloquent in detailing our desperate plight in a carefully prepared and printed speech. The Vice Chancellor instructed the Provost to arrange, that same evening, an emergency meeting of the VC, Chief Medical Director, (then Professor O.O. Ajayi), the Provost and the Dean, to chart for dentistry, a rescue operation. Some of the decisions taken that day saw the programme through the darkest hours till light eventually shone through.

Mr Vice Chancellor Sir, I guess you ask how come I was left behind when everybody else left. It would be total falsehood if I pretend not to have seriously considered the idea. Going abroad then was first and foremost a way of escape from a degrading poverty in the midst of opulence, which was reserved only for the military class and their accomplices. Furthermore, for the academic and other professionals, it was a sign of possessing a marketable CV. A feeling of inadequacy pervaded the atmosphere around those left behind. So, through my husband who had taken up an appointment at the University of Zimbabwe, I was invited for an interview and thereafter offered appointment as Lecturer in the Community Medicine Faculty. Probably for the sake of posterity and maybe for a day like this, I was destined to remain behind because prior to taking up the appointment, my husband was again offered a Rockefeller Foundation Fellowship and so left Zimbabwe for the United States of America.

"Single-Handed Dentistry" – Appropriateness of Title?

All through this account, I have repeatedly mentioned that great grace was granted me almost at every point. I guess you wonder "who by"? I title my lecture "Single-handed Dentistry" and elaborated convincingly the rather impressive feats I have so far accomplished. But would I really have told the entire story if this lecture ended at this point? Certainly not! As in the words of the Apostle Paul;

> "What do you have that you did not receive? And if you did receive it, why do you boast as though you did not?"
>
> *1 Corinthian 4:7.*

Undoubtedly and without mincing words, I boldly admit that I have been a recipient of uncountable favours; from God and man. Or how else could I have survived and accomplished all I have in an environment where government takes no responsibility for the generality of its citizens let alone pay special attention to those needing such.

Beginning from the point at which the accident occurred on that fateful evening, I was rescued from the vehicle by a kind lady, who even though was heading to Lagos, put aside her plans and drove me back to UCH. As the biblical Good Samaritan, she followed up my recovery and much later on, she and her husband visited me and introduced themselves to me. Somehow, their names did not register but wherever you are, I wish to let you know that I am grateful for your selfless act of love. If we were living in a society with well-oriented values, you would today have been honoured as a hero. Be assured however that in my heart, you will forever remain a heroine!

Permit me at this point to address an issue that constantly agitates my mind. How come Nigeria is unable to put in place an efficient and sustainable system to take care of its citizens when disasters happen? By the way, some of the disasters that daily plague us are needless for they can be prevented if only we as a nation are determined and committed. How come a country as wealthy as Nigeria would still expose its citizens- both high and low, to ply such deplorable roads, most of which should be more appropriately described as "conveyor belts to hell (or heaven as the case may be)'? To further compound the problem, Emergency Rescue Operation in this nation, if it exists in name, is virtually non-existent in reality.

When we continue to ignore the crying need to make our roads safe, we forget that no one is spared in the devastating consequences that may follow. Starting from the policy makers to the contractors, everyone has a duty to act selflessly

To return to the point I was making before the digression, pandemonium engulfed the entire hospital the next morning when it became clear that the best treatment option available was amputation. I could sense it was not an easy decision and the surgeon, Mr O. Oyemade, would certainly have wished someone else did the job. As a compe-

tent surgeon that he is, all the odds had been weighed and the best was being done. In a twist of fate and as if to reassure this great orthopaedic surgeon of my absolute trust in the collective decision taken then, his wife, Professor A.O. Oyemade became my Ph.D. supervisor. At that time, I was particularly encumbered by the weight of the office posts I was holding and did not value pursuing my own personal progress. Time will not permit me to elaborate on the degree of dedication with which this highly disciplined and meticulous professor followed my progress until I completed the programme. I have since been a part of that loving family.

As I set on the path to recuperation, many came to cheer me up but Professor O.G. Ajao and Dr Aderonke Olumide were certainly more than my Hall Wardens judging by the love and concern they exuded.

Professor J. O. Daramola, Head of the Dentistry programme who was visibly shaken, immediately sprang into action to prepare all the necessary papers for approval at the higher level. He could not have done any more than he did for me had I been his own child.

I have such vivid memories of the care and training given by the physiotherapy team, headed by Dr Oshin. Immediate contacts were established when it came time for the fabrication of a prosthesis.

The choice of the lecture title disintegrates even faster when I consider the rehabilitative process. I hasten to reemphasize the fact that I received no compensation following the accident. Were it not for the generosity of the University of Ibadan through the leadership of the College of Medicine administration, how could an indigent student like me hope to raise the funds to travel to the United States of America to be fitted with the artificial limb? Emeritus Professor Oluwole Akande, Provost of the newly established College, recommended strongly to the Vice Chancellor.

Working in the background is the gentleman I have since called "father". Emeritus Professor O.O. Akinkugbe demonstrated as usual great affection and I am left in no doubt that some of the favours I received were not unconnected with his kind support. From that point on and along my career journey, I have had the great fortune among one of his mentored children.

I cannot but register my gratitude to all my teachers in the Dental School - Professor Daramola, Professor Ajagbe, Dr Moronke Noah, Dr Bode Falomo, Dr Tokunbo Abiose, Dr Davidson Lawoyin, Professor Jonathan Lawoyin, Dr S.P Luthra, Dr Kulasekara, and Dr Adewunmi.

My classmates - Nike Oguntimehin, Dupe Arowojolu, Ambrose Obiechina, Alice Nweni, Weriguara Okolo, Uptal Bose, Lera, Rotimi Olowookere, Ada Asinobi, Bisoye Alabi, Taiwo Fetuga and my friends – Labo Ademola, Lauretha Knight (USA), Deloris Artis(USA), Dupe Aderibigbe, Kemi Oyegbile, Bisoye Alabi, Tunji Bolu, Toyin and Niran Fafowora, for being the stabilizing force around me in the post-traumatic phase. In his own way, each supported, encouraged, lent a second hand, which I needed more frequently at that time.

I would have failed abysmally if this lecture does not address with the emphasis it demands, the unacceptable way some within this society express social concern through misplaced charity. Charity on its own is a good gesture, but given in placeof the rights of the individual within society especially as a public show, becomes demeaning and misplaced [37].

Moreover, every citizen should be viewed as representing a potential national resource, and a factor in production and national economy. It is in the light of this that the United Nations, made in 1975, the Declaration on the Rights of the Disabled; Article 6, which states as follows:-

> "Disabled persons have the right to medical, psychological and functional treatment, including prosthetic and orthotic appliances, to medical and social rehabilitation ..... and other services, which will enable them to develop their capacities and skills to the maximum".

It has been proven over and again that given the right environment and encouragement, persons with disabilities can contribute significantly to development. This observation is again buttressed in me. How so much I wish that others would be given the opportunities that I have received.

Single-Handed Dentistry – Further Fall of Title

Any further claim to independent accomplishment in clinical practice would amount to ingratitude to the group of health care workers without whom I may not have been able to carry out many clinical procedures. As earlier described, in four-handed dental practice, the dental surgery assistant is expected to put at the service of the operating dentist, his two hands, which then complement the two of the dentist. Because the equation remains unbalanced on each occasion I am involved, this group of health care workers have graciously given more than is required by their job description. This was done so cheerfully, done to preserve to the utmost, the dignity of the recipient, which was me. As a consequence, today, I call you to celebrate Mrs Grace Aluko, Mrs. Esther Odeyemi, Mrs. Tola Osho, Mrs. Tope Ogunyemi, Mrs. O. Akande, Mrs. Yemisi Ologunja, O. Olowokere and my community health assistants in Idikan who should rightfully share the much-deserved laurel.

When the going gets tough, the tough do require lubrication to get going. It is pertinent to recall some of the most touching and encouraging words that have pepped me up. Professor Ajagbe has such an open door policy; the lock to his office got damaged and it was never replaced. So his door always stood ajar. One day, he invited me in as I walked past his room. He was wearing a rather serious look. What he said was most humbling; it remains with me till today. "Gbemi" he said, "I don't want to postpone this till when you assume prominence and fame – it would seem like sycophancy. I just wish to let you know that your life has been such an inspiration". After thanking him, the discussions that followed in that relaxed atmosphere, has heightened mutual admiration and trust between us.

Significant among my modest works is the establishment of the Primary Oral Health Centre in Idikan, because it not only stands as a tangible and yet unmatched contribution in operational research, it has taught me lessons in friendship, cooperation, perseverance and lots more.

In a commonly used Yoruba saying,

"Agbajo owo la fi nso ya. A je je, owo kan o gbe'ru dori"

Literally meaning you require the full complement of the fingers on your palm to beat your chest in self assertion and in the same way, lifting a heavy luggage to your head, is a feat that cannot be accomplished independently.

No sooner had the idea been voiced than it was embraced and given life by Adejoke Fatunde, a younger friend, yet possessing such strong will power, drive, courage and intellectual capabilities. Rents and other expenses were paid from our personal resources for the first few years of the project. She has had phenomenal impact on my attitude to work and life. Little wonder then that when she emigrated, I was at a loss but again God sent help.

The programme received constant coverage by dental and nursing officers, notable among who are: Dr T.A Banjoko, Dr C.O. Onyeaso, Dr E. Longe and Dr Olusola Ibiyemi.

Of the Public Health Nursing Staff posted to date, Mrs C. O Badejo stands out distinctly. The programme was resuscitated and has continued to thrive in her time.

Whilst in truth I was the only academic staff on ground at some point in time, I was by no means to carry the burden alone. Solidly in the background was a team of "Generals" led by the indefatigable Dr. Juwon Arotiba. The dental school as it is today would never have been without the efforts of Dr Modupe Arowojolu, Dr Wole Dosumu, Dr Obafunke Denloye, Dr O. Akande and Dr J. Taiwo.

I pray the Lord for an opportunity to write my autobiography, then I shall be able to elaborate on the positive impacts of the following people in my life and career. I crave special indulgence for now, to simply list these precious people.

I wish to thank the Provost, Professor I. F. Adewole for his distinctive leadership role and determination to ensure that the College of Medicine attains unmatched progress in human and infrastructural facilities in his time.

I also wish to thank my Dean, my cherished colleagues from Ile-Ife, Lagos, Benin and the State Service. I also appreciate members of

the organizing committee for this lecture and my wonderful students for arranging such an impressive outing.

May I also appreciate the following:

Professor Temitayo Sokunbi for believing and cheering, a good friend indeed.

Mr. and Mrs. Tunde Adesina – Ever so close. Being there to hold and to support.

Dr. and Mrs. Layi Shittu – Trusting friends

Dr Onaolapo Soleye- Ever ready to inspire, encourage and promote.

Professor Idowu Olayinka – never without a word of encouragement.

My teachers – Professor Nottidge, Professor Adebo, Professor Lawani, Professor Soyanwo, Professor J. D. Adeniyi, Professor F. A. A. Adeniyi, Professor Kikelomo Osinusi, Professor Yinka Falusi, Professor O. O. Kale, Professor Sridhar, Professor Bamgboye, Professor Oyediran, Dr. Modupe Onadeko, Dr Lola Adekunle, Professor J. D. Adeniyi, Professor Oduntan.

Members of the Programme for Entrepreneurship and Innovation led by Professor Adedoyin Soyibo – for being a strong current for progress.

Dr Lola Sadiq, Dr Bogunjoko, both of the World Health Organization, Dr Louise of NPHCDA, Dr Toyin Salawu of Federal Ministry of Health - for trusting and including.

My stepsisters and brothers, uncles and aunties - such good family members.

My friends and prayer partners - The DDL – I could never do it without your camaraderie and prayers.

Single-Handed Dentistry: Final Collapse of Title

The earliest burden of caring, making necessary contacts and nursing me back to health fell on my family in Ibadan -The family of Mr and Mrs Yinka Johnson. These duties were discharged with utmost affection.

I have consistently found the words of Wilson Woodrow, 28th US President, most applicable in a special way.

" A man is not as big as his belief in himself; he is as big as the number of persons who believe in him"

Wilson Woodrow [38]

My siblings— My "Big Brother" - Mr Edward "Eddie" Olayiwola Aderinokun and his wife, Aunty Biola, My sister and mother, Mrs Yejide Ajayi and my brother "Uncle" Kayode Ajayi, My darling brother; Kayode Aderinokun-fondly referred to as 'Sailor" and his wife and my sister, Laitan Aderinokun; My precious jewels, brother and sister Tayo and Funlola Aderinokun.

These are clearly people who believe in me. Words fail, letters incapable of expressing the kind of support they lovingly dished out. As true co-passengers on the journey, this lecture is for us all. It should rightfully be dedicated to our late parents, Pa Solomon Olaifa and Rebecca Adebisi Aderinokun, who in the course of our upbringing left us with no option than that we must stick together through the good and bad times and bequeathed to us the spirit of long suffering. Mama, I wish you were here today, but your resourcefulness and boundless love lives on.

I cannot but publicly acknowledge my in-laws on such an important occasion. My parents, brothers and sisters in the Oke and Olukoga families- yours is exceptional love. I have thrived because you created for me, a conducive atmosphere.

I have enjoyed extraordinary warmth, love and support from my adorable children; Damilola, Babajide and Temitope Oke.

As to the role of my husband, Professor Bankole Oke – my friend (for that summarizes more aptly the multiplicity of what he has been). To say that he stood firmly by me is to belabour the very obvious. Neither the consequences of the accident nor the discouraging comments thereafter deterred him from being my motivator and backbone. Ours has been unwavering love and that it stood in the face of such challenge is testimony to its depth.

It is commonly said that no one can clap with one hand. This statement is re-echoed in the popular Malayan proverb:

" Clapping with the right hand only will not produce a noise" [39].

That is why my curiosity became instantly aroused by the title of a book written by Olawale Oshun- "Clapping with one hand" [40]. Could this man have also experienced what I considered one of life's wonderful blessings? I once clapped with one hand and do you know - it was one glorious moment. Ask me how? We were at a gathering when the speech demanded a round of applause. Instantaneously, out from my left side appeared a little left hand, belonging to my son, Temitope, then eight years old. He supplied his left hand to complement my right. It was an ovation that rang melodiously in my ears as well as in my heart.

What Next?

"To whom much is given, much is expected". Much has been invested in me, I cannot but give back to society, a little of what I have received. Realizing that I possess the attribute to work with others in synergy for progress and success, this would be explored with firm determination and a sense of mission. This would be directed at promoting my chosen profession and field of specialization, both of which have not been accorded appropriate attention. I should continue to play the advocate until the profession assumes its rightful status.

Having recently been appointed onto the board of the Programme for Entrepreneurship and Innovation of the University of Ibadan, there is a ready platform from which to spring to action in fostering University-Private sector collaboration for mutual development.

Along the way, it is my desire to continue to give a dignified, honourable and positive face to physical challenge and stand clearly as a symbol of hope to the discouraged. Towards these lofty goals, I shall continue to seek your hands in partnership.

Thank you for listening and have a Merry Christmas!

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