

NIGER DELTA UNIVERSITY WILBERFORCE ISLAND

19TH INAUGURAL LECTURE Family Medicine: The complexities of differentiating undifferentiated diseases in a differentiated profession.

By:

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9th March, 2016

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Dedication

This work is dedicated to my late grandmother, Mrs Ifeyinwa Sondu, for her love, care and determination to get me educated.

PROTOCOL

The Vice-Chancellor The Deputy Vice-Chancellors, Academic and Administration The Provost of the College of Health Sciences The Registrar The Chief Librarian and Other Principal Officers Members of the Governing Council The Dean, Post-Graduate School **Deans of Faculties** Distinguished Professors of NDU and other Universities Directors and Heads of Department Distinguished Faculty Members and Senior Colleagues from within and outside NDU The Nigerian Medical Association Staff and Students of NDU Your Royal Highnesses My Lords, Spiritual and Temporal Friends, Family and Kinsmen Very DistinguishedGuests Gentlemen of the Press Ladies and Gentlemen

ACKNOWLEDGMENTS

It is with a high sense of gratitude that I give glory to the Almighty God for His unfailing love, mercy, grace and faithfulness upon all aspects of my life and my family. My heart is full of joy and I am humbly and awesomely grateful, for taking me thus far.

With adeep sense of appreciation, I give special thanks to my loving and beautifully minded wife Barr (Mrs) Beimonyo Brisibe "Anetorufa" for her prayers, patience, support, care and love. She is indeed a blessing, her attention to details and hardwork is inspiring

Special thanks to my wonderful and inspiring children, Kiseye, Ibinabo and Pere-ere, for their understanding and love.

My sweet mother, Madam Ojoibo Odede deserves a special recognition and thanks, for giving her all for me and for her inspiring words, prayer, support, care and love for my family.

Special thanks to my dear Odoni Mama,Mrs Theresa Ogidiga, and my lovely late grandmother,Mrs Ifeyinwa Sondu Suokiri, for doing their best for me, most especially during my tender and formative years.

To my maternal grandfather,Mr J. K. Suokiri,and his enduring spouse, Mrs Edefina Suokiri, I owe a big gratitude. These persons

collectively did a lot to instil discipline, hard work, strength of character, humility and love in me.

To my maternal uncles and aunts, Barr Jackson Suokiri, Barr.Odonbadei Suokiri, Mr Freeman Isowo, Chief Lawson Ogidiga(late), Madam Warimenisougha, Mr Asalagha, and a host of others, I owe muchof gratitude for believing in me and supporting me in no small way.

Special thanks to my father, Chief Thompson Brisibe, a renowned educationist and teacher par excellence, for instilling discipline, integrity and for serving as an excellent role model.

Special thanks to my stepmothers, Mrs Afani Brisibe, for believing in me, and for the love and care. Mrs Catherine Brisibe, Mrs Accrasuitu Brisibe and Mrs Naro Brisibe. They are all wonderful mothers. I specially appreciate them all.

Special gratitude to my paternal uncles and aunts, especially Mr Governor Brisibe and Mrs Gladys Brisibe, for being my father and mother at all times; also to Mrs Gesiere Brisibe-Dougu, Mr Martins Atti, AVM Sam Atti(rtd), uncle Bubai, and Chief Lucy Brisibe for always asking the question "where are you now". Their inquiry has followed me everywhere I have been. I also thank Prof Amadon Brisibe and Dr Preye Zuokumor for inspiring me. I owe a lot, and cannot thank them enough.

To all my wonderful siblings, cousins and friends, I say a big thank

you for supporting me all through and through.

Special thanks to my graciously spirited mother-in-law,Mrs Doris Wanatoi and her family for their care, support and prayers; and for inspiring me through challenges.

I say thank you to my father-in-law, Chief Bennet Owei Zala, and the entire Owei family for their support. Special thanks go to Dr Otonye Owei, for believing in me and instilling in me the courage to practice medicine, even in the most challenging situations,

Special thanks to my childhood friends and classmates in State Primary School, Odoni; River Nun Grammar School, Agbere-Odoni and Asoama Grammar School, Sabagreia; for the fun and non-envious, healthy competition that did much to bring out the best in me, especially Air Commodore Kurotimi Obidake, Ebi Afen, Dr Kemesuode Nikade, Darlme Koki, Douye Angaye, Korinake Angage, Timpa Baraka, Pastor Bolou Appah and Godwill Isele Timi Uzaka, Immomotimi Ckiko and Ebikabowei

Special thanks to beautifully minded Alumina ofAsoama Grammar School who foundtime to come back home to tutor us during the long vacations. Prof D Wankasi, Justice B Ugo, DrE Ageda, and the late Dr I Angaye, and I still remember.

I am most grateful to the Class U88 of the University of Port Harcourt Medical School, especiallyDr Aaron Friday, Dr Best Ordinioha, Dr Livingstone Solomon, Dr Selepri Orubebe,Dr Sawyer, Dr Jeremiah Israel, Dr Opara Kingsley,Dr Malcolm Brisibe for learning together on how to overcome challenges. This class taught me how and what it takes to be resilient. My Research partners and friends Dr Best Ordinioha, DrLucky Onotai, Dr Daprim Ogaji, DrWisdom Sawyer, Prof P. J Alagoa, Dr P. O. Deinye, and Dr Precious Gbeneol. Without them, the achievements on display today would not have been possible.

Special thanks to my Provost, Prof. G. B.Fente, for his support and brotherly care right from the UPTH.The same appreciation goes to my dean, Prof.Harry and Prof Mrs Kunle-Olowo. My esteemed colleagues in college, Dr Oriji,Dr Omietimi, Dr Nwapi,Dr Itimi,Dr Akani(whose face was shown to me to study FM), Dr Omu, Dr Andy Ifeliyku, Dr Leigha, Dr Bokolo, Dr Ebi Toyten, Dr Mrs Peterside, Dr Mrs Immanualle, Prof Ogaina (The CMD NDUTH)Dr JJumbo, Dr Mrs Onya, Dr Mrs Ndukwu, Dr Judah, Mr Amaebi Orukari,Dr Iwe Agbozu ,Dr Steve and Onari Ogaji, etc.All these people contributed positively one way or the other to the enrichment of my life and I am grateful to them all. To my colleagues in the NMA(Dr OC Koroye,Dr Azebi, all members of the present Executive(Bayelsa) and all past Chairmen and Exco members, I appreciate you all.

I have to specially thank Prof Raphael Oruamabo not only for being my teacher, but also for the role he played in my appointment into a yet to be created Department of Family Medicine. I can't thank him enough for providing me with this opportunity. I recall he insisted during my interview that I should be placed in Internal Medicine Department, when it seemed as though I wasn't going to be engaged, because there was no Department of Family Medicine in the Faculty. Infact, Mr Suowari (who was the registrar and one of my father's students) quickly acted as a guarantors on my behalf to the board, assuring them I would add value to the system even in the Department of Internal Medicine.

I must specially thank Profs K. K. Immanagha, O. J.Odia and Osinowo, who gave me the golden opportunity to establish the Department of Family Medicine in the University. They would surely be remembered in the annals of the history of Family Medicine in the University and in the country.

Many thanks to my well respected teachers, Prof. Nelson Brambiafa, Chief Dr Mangete and Prof Alice Nte, Prof Odia, and Chief Dr U. S. Etawo whom I do give problems from time to time, but who never lost faith in me but rather supported and encouraged me always.

My teachers and mentors in Family Medicine, Dr P. O. Deinye, Prof Udunwa, Dr Mrs Ladipo, and Prof Victor Inem, Dr Akin Moses, Dr Okonkon, Dr Amao, Dr Ajayi and Dr Obiogbu, deserve special mention and thanks, for helping me to become first a Consultant Family Physician, and now a Professor. I also thank them for their selfless service towards the development of the Family Medicine specialty in Nigeria.

I started my residency in Family Medicine in UPTH under the

watch of Dr Deinye, as a restless young doctor, but Dr. Deinye was patient with me in all my restlessness and excesses, and gave Dr Precious Gbeneol and I all the necessary support to excel. Both of us pride ourselves as his first children because we were the first residents he trained from start to finish.

Prof Udunwa and Dr Okonkon were my teachers who showed love and made dedicated effort to see me excel in my chosen career. These men have passion and inexhaustible energy for Family Medicine and have put in their all in the development of Family Medicine as a vocation in Nigeria.

I also want to specially thank Dr Precious Gbeneol whom I did my residency in Family Medicine with, served together with in the executive council of the Association of Resident Doctor, UPTH and later had the special honour to work with and be a part of her success story when she became the Senior Special Assistant to the President on MDGs (SSAP-MDGs). Dr. Gbeneol, you are a wonderful friend, sister and boss !!!

It is important to thank my teachers in my tender years. That included Mr Kpowo, my dedicated headmaster in State Primary School, Odoni; Mr.Pura,my primary school teacher that was very excited with every progress I made; Chief Christopher Alazigha, Mr Mintin Miennane, the late Mr Lucky Baraka, Mr Mark Werigbelagha,Mr Ziton Ayawari and so on. I appreciate you all.. I owe a big debt of gratitude to my primary constituency, the Nigerian Medical Association and the National Association of Resident Doctors. The ARD UPTH, thank you for giving me the opportunity to serve you. To NMA Rivers State and Bayelsa State, I cannot thank youenough for the opportunity given meto serve in various capacities, and for being there for me all through.

Special thanks to all health professionals that worked with me in the past years. Most especially the nurses I worked with in A&E Department, Family Medicine and staff/NHIS clinic in UPTH. These wonderfully spirited nurses assisted me severally, even unsolicitedly.

I must not forget thewonderful set of people I metduring my secondement to the OSSAP-MDGs in Abuja. The MDG Focal Persons of all the 36 States and FCT; the Technical Assistants in all the benefitting LGAs across the country; and my colleagues in the Abuja office, especially Mr D. Ibikunle, Alhaji Garuba, Mr Dimas, Ms Josphine, Mrs Halima, Alhaji Yahaya Hamza, Dr Falegan, Dr Otabor, Mr Gallis Harry, Mr Abimbola, Mr Abubakar, Alhaji Zubuiru, Mrs Okere, Ereye, Chris, Hafiz all STAs/ZTOs and the indefatigable Mr. Babatunde David.The list also includes my friends Mr Jerry Nwachukwu and Mallam Ibrahim.These young men and women deepened my ability to pay attention to details, and helped sharpen my focus on the attainment of goals.

My very special thanks also go to the Vice-Chancellor, Prof H. Ogoni, for the opportunity given me, and the Registrar,Mr Morris-Odubo, for always being a friend and a brother from his UST days. Special thanks to the all the administrative staff of the University and College of Health Sciences.The College Secretary, MrsZuofa, and Faculty Officer, Faculty of Clinical Sciences, Mr Okomoko, equally deserve my appreciation for their support and understanding.

PREAMBLE

It is with the deepest sense of humility and in expressible gratitude to the Almighty God that I accept the unique responsibility to present this inaugural lecture on behalf of the College of Health Sciences of the Niger Delta University. Quite naturally, my gratitude can be traced to several factors. First of all is the grace of God which saw to the making of this day and also made it possible for me to become the first from the U88 medical class and the 1995 graduation class of the University of Port Harcourt Medical School, to attain the rank of a Professor. By virtue of this achievement – again through grace – I also became the second Professor of Family Medicine in Nigeria as well as the first Professor of Family Medicine to be given the privilege to deliver an inaugural lecture.

Mr Vice-Chancellor, Sir, I want to thank you specially for giving me the privilege to present this inaugural lecture, which is the 19th in the series of inaugural lectures of in this University, the 4th from the College of Health Sciences, and the first from the Department of Family and Community Medicine. I am particularly delighted to be among the cohort of professors appointed in the university during your term as VC. Also commendable is the privilege given to us to deliver our inaugural lectures in quick succession. This has enabled us to present our academic works to the university community in particular and the public in general, and to make recommendations for the health sector in Nigeria. I have the added responsibility of using this inaugural lecture to further deepen the understanding of the public and the academia on the medical specialty of "Family Medicine", this being the first inaugural lecture on Family Medicine in Nigeria. In view of this, I have titled this discourse "Family Medicine: The Complexities of Differentiating Undifferentiated Diseases in a Differentiated Profession" to emphasize the crucial role of the family physician as a clearinghouse, coordinator, communicator, patient-advocate. A leader who sees patients with every conceivable medical problem, stabilizes them, and refers them, when necessary, to the other specialists of medicine. I also hope to use the opportunity of this lecture to advocate for the proper placement of Family Medicine in the contextual framework of cost-effective/efficient medical service delivery.

To clarify the title of this inaugural lecture and lend coherence to the discourse, I have divided the presentation into the following four sections:

- How IChoseFamily Medicine as a Vocation.
- The Theory and Praxis of Family Medicine.
- My Contribution to Knowledge in Family Medicine and Primary Health Care; and
- My Thoughts on the Growth and Future of Family Medicine in Nigeria

How I Chose Family Medicine as a Vocation

I started my medical education at the University of Port Harcourt, Nigeria, in November 1988. Even though this has the ring of success to it, one fundamental reason why I began the programme was because I failed to gain admission to the 44th regular course of the Nigerian Defence Academy(NDA) in Kaduna. I was fortunate to have passed the JAMB exam well enough to qualify for a place in the Medical School of the University of Port Harcourt. But that was not my primary interest. I was very angry and disappointed that I did not pass the NDA qualifying interview and had to make do with the second best option. I was, there fore, very unhappy and that feeling persisted throughout my pre-clinical years. My frame of mind was hardly helped by the confusion that greeted the change in the curriculum of the medical programme of the University of Port Harcourt which reduced its duration from seven to six years. This change was associated with frequent policy somersaults and caused severe challenges and hardships such that out of a cohort of 121 students that were admitted to the medical school in 1988, only 38 graduated at the stipulated time. Suffice it to say that I was one of them.

How did I find myself in Family Medicine? The first inclination to specialize in this area of medicine probably happened in1994. There was a protracted ASUU strike in that year which compelled all students to go home, so I went to Ojobo, intending to be soaked in the tranquility of the village. I needed the quitness of

that rural setting to read and prepare for the Obstetrics and Gynaecology and Paediatrics examinations that would come up on resumption at school. We had completed formallectures and had had alittle clinical posting before the strike.Fortuitously, Ibecame so involved in providing primary medical care to members of my community, in the course of my stay in my village, that I developed a penchant for rural and general medical practice. What I saw of the medical needs of the grassroots population at thatpoint opened my eyes to a new realityand I started dreaming of opening a hospital in Beimo-Ojobo and another one in Tamuo-Isadani, in Okoloba-Sabagreia after my graduation.

Quasi-medical practice began for me as a twist of fate one afternoon when I heard a loud wailing and people calling out,"Where is Thompson's son, the doctor!!" The commotion grew louder as people rushed towards my father's house to inform me of an ominous medical emergency which involved my uncle's wife. She had fainted and everyone was desperate to see her revived. Naturally, they thought of no other person to do the work except me. Their expectation of my capability was as strong as my doubt. I was whisked off to the poor woman's bedside where I heard all kinds of "native diagnosis"In the midst of the pandemonium, some were saying "the witches are the ones killing her", "she is bleeding from her private part","she is having a miscarriage",etc.These gave me a clue and some courage to intervene. The patient was almost lifeless and heaps of wrappers were tied around her mid region. I quickly requested for intravenous infusion (Dextrose/saline) and an infusion giving set, which were speedily procured from a nearby chemist shop. The needed help had come! There was a doctor in the house! But alas I couldn't even set up the drip! The patient's veins were all collapsed and I lacked the needed skills to locate them!

I made several unsuccessful attempts before advising that the patient be taken to the nearest hospital with a resident qualified medical doctor, which was in Bomadi and one hour's drive by boat . This ignited another round of wailing and some uncomplimentary remarks about my competence. I was ashamed of my inability to help, but was happy when the people insisted that I join the boat conveying the patient to the hospital. It was tiny boat which accommodated five persons. That included a native massager; me, the unqualified doctor, and three "wailing wailers". The massager was busy massaging the jaws and body of the patient. I was busy measuring and re-measuring the vital signs; while the three wailing women carried out the instructions given by the massager and/or me, which were sometimes conflicting. The patient immediately lost consciousness when the massager, using all her clout as the more experienced practitioner, instructed the women to bring down the legs of the patient. My superior knowledge or counsel, however, prevailed when the patient regained consciousness upon my insistence that her legs be raised. This was relayed back to members of my community upon our return from the hospital. At the end, it was on that piece of medical advice that my reputation as a medical practitioner was based. From that moment, everyone in the community came to me for medical treatment. I saw the enthusiasm on their faces. I saw the needs in their lives, I could not hold myself back for lack of experience. I decided to give to them all the skills I had learnt no matter how inadequate I felt they were. After two months of this practice, and with cash flowing in, I vowed to open a clinic in my community after graduation; I felt a strong urge to continue to help the people. I couldn't fulfill this vow after my graduation for reasons that are not very germane to this discourse. Nevertheless, the experience gained during that village intervention made so much impression on me that I stated in my graduating class year book of my preference for Urology or Obstretrics and Gynaecology as a vocation. This turned out to be a vital decision of my professional life and the first step of a career journey that has brought us to the discourse of today.

I was employed in 1998 as an Accident and Emergency doctor in the University of Port Harcourt Teaching Hospital and I started enjoying the challenges and practice of emergency medicine. I became enthusiastic and even inspired about the unpredictability of the medical problem of my next patient. I started thinking of a specialty that could be deployed to manage the varied cases, including the unpredictability, the undifferentiating symptoms, case coordination as well as successful outcomes. A picture of Emergency Medicine and Family Medicine welled up in my mind. Driven by the desire to own and run a private clinic in a rural setting, I seized the earliest opportunity to enrol to do Family Medicine. I made the final decision to specialize in Family Medicine in 2000, and today, the same jittery and inexperienced medical student who was unable to set up a drip has now become a professor and is actively involved in training of competent medical students and doctors who are thoroughly equipped for rural practice. What started as a dream in the imagination of a young medical student has now become a veritable area of practice to which many young practitioners have subscribed.

The Theory and Praxis of Family Medicine Vice Chancellor, Sir, Family Medicine is the medical specialty that provides comprehensive, continuing, coordinated and compassionate care to patients irrespective of age, sex, disease, state of health or illness. It is a subdiscipline imbued with some essential aspects of the other medical specialties which it uses to provide integrated care to the patient, often in the primary and secondary levels of the healthcare system.

It would be recalled that at the beginning, medicine was practised bythe generalists, as contained in Genesis 1:27, 2:21. In these Bible passages, God created man,and noticed afterwardsthat manwas lonely and needed a companion and helper; so He put Adam into deep sleep(Anaesthesia), and removed a ribfrom him (surgery) to create Eve(Obstetric and Gynaecology). Then a prescription was given toAdam and Eve on what to eat and what not to eat. (Internal Medicine). But Eve and Adam ate the forbidden fruit (probably a psychotropic drug) and then realized they were naked. This story shows, therefore, that the conceptual and contextual beginning of medical practice was general.

It also follows, therefore, that the whole of medical practice started as Family Medicine and then continued in the fashion described in these Bible passages up to the last century. Medical practice was characterized by holistic, comprehensive care and compassion, as exemplified by the practices of Hippocrates, the acknowledged father of modern medicine. This, fortunately, is still being maintained in Family Medicine; and patients are usually very thankful, as demonstrated by Sir Luke Fides who, in 1807, did a painting in memory of his son and his family physician Dr Murray, symbolizing medicine as a caring and compassionate profession, despite the fact that he lost his son. Medical care without science can best be described as well-intentioned kindness; and onthe other hand, science without compassionate care empties medicine of healing, and deprives it of a proven and very potent healing tool. The two complement each other, and are very essential in the art of doctoring(B Lown, 1996: 223).

The United States is a country that has demonstrated clearly the importance of Family Medicine practice and the ills of the current

multiplicity of medical specialties. In the 1800s, the was Americans were still settled in small towns, and farming and production of goods were the majorfoundations of the economy. Health care was unstructured; the doctor often visited his patients in a horse and buggy. Most of the doctors did not have any formal training in medical school; most learnt the job as apprentices, working with older physicians, and supplemented their knowledge by attending small courses and workshops. There were no medical schools, no organized medical training, no regulatory body, and noestablished system to ensure the quality of caregiven. Most of the time, the doctor went to visit patients and took care of all members of the family. The doctors knew their patients very well(often from cradle to death), they delivered babies, set fractures, treated a multitude of illnesses, helped those dying, and some did surgery and took care of trauma. Many were astute clinicians with great knowledge and capabilities; and they were very committed to serving their people. Although many of the doctors were outstanding physicians among them, yet there were also many who claimed incredible healing powers Indeed, there was a lot of "quackery" and no standards of care to which doctors were held.

Eventually, changes were made in the training of medical doctors, and strict regulations were put in place to curtail the activities of quacks. These changes resulted in the significant increase in the cost of medical education, which shut out people from the lower socio-economic class from the profession, and made medicine a profession of the upper class.

These changes encouraged specialization, and significantly reduced the number of general practitioners (GPs). The shortage of GPs began to elicit public outrage by the 1960s, with the near absence of doctors in rural areas and inner cities, the high cost of medical care, the increased depersonalization of medical care, and the growing fragmentation of the medical profession.

These discontents compelled the American Medical Association to set up experts committees in 1966 that resulted in the publication of threelandmark reports. These were the Millis, Folsomand the Willard Reports. The Millis Report looked at ways of encouraging the practice of Family Medicine in the US. The report called for "A physician who focuses not upon individual organs and systems, but upon the whole man, who lives in a complex setting... who knows that the diagnosis or treatment of only a part of the human body often overlooks major causative factors and therapeutic opportunities."

The Folsom Report said, "Every individual should have a personal physician who is the central point for integration and continuity of all medical services to his patient. Such physician will emphasize the practice of preventive medicine... He will be aware of the many and varied social, emotional and environmental factors that

influence the health of his patient and his family... His concern will be for the patient as a whole, and his relationship with the patient must be a continual one".

These reports led to the establishment of the American Board of Family Practice (ABFP) in 1969, which recognized family medicine as a new medical specialty. The ABFP conducted its first certification exam in 1970 and became the American Academy of Family Physicians (AAFP) in 1971. Residency training programme started in Family Medicine in 1972, and subsequently, Family Medicine became an essential component of the medical curriculum taught to all medical students in their clinical years in Department of Family and Community Medicine.

The History and Development of Family Medicine in Nigeria

The conceptual principles of the development of Family Medicine in the United States and those of Nigeria remain fundamentally the same despite the slight contextual differences. The development of Family Medicine as a specialty in Nigeria can be traced to the activities of the Association of General Medical Practitioners of Nigeria (AGMPN), and the regulatory body for medical practice in Nigeria, the then Nigerian Medical and Dental Council (NMDC).

In the 1970s, doctors graduated and, after avaried period of tutelage, ventured into private and rural practicewithout any specialist training in Family Medicine. This was mainly to serve a growing population in need of quality medical care. Within this period, there was increased rural-urban migration, due to the oil boom, which resulted in the aggregation of doctors in urban centres and the stronger need to provide quality services. The Association of General Medical Practitioners of Nigeria recognized the need of its members for training and retraining, and promptly developed a Continuing Medical Education (CME) programme to fulfill these needs. The CME programme was recognized by the Nigerian Medical and Dental Council, and grew to become the Faculty of General Medical Practice(GMP) in the National Post-Graduate Medical of College of Nigeria, with statutory rights to train postgraduate doctors in Family Medicine, and confer fellowship in Family Medicine of the National Post-Graduate Medical of College of Nigeria.

The Faculty of General Medical Practice of the National Post-Graduate Medical of College of Nigeria liaised with the British Royal College of GMPs to develop a training curriculum and gained further international recognition with a partnership with the Ford Foundation. Dr Andrew Pearson, a Fellow of the Royal College of GMP swas appointed the founding director of the postgraduate training programme of the Faculty. The main objective of the training programmeis to produce specialists that will demonstrate the competencies of the Family Physician described in the Millis and Folsom reports. In the Nigerian context, this would include deeper competencies in surgery, paediatrics, Internal Medicine, as well as Obstetrics and Gynaecology, because of the peculiarity of our health care delivery system and the health seeking behaviour of Nigerian patients. Therefore, the development of Family Medicine in the US and Nigeria justifies Dr Stephen's remark that: "Medicine is always the child of its time and cannot escape being influenced and shaped by contemporary ideas and social trends". We are all products of history. History does not just explain the past but also provides the framework for understanding the present and the future.

Core Principle and Concept of Family Medicine

The Family Physician is a trained generalist who takes professional responsibility for the comprehensive care of unselected patients with undifferentiated problems, and who is committed to the person's health and well being, regardless of age, gender, illness, or organ system. The clinical specialty of family practice is patient centred, evidence based, family focused, and problem oriented. Family physicians acquire and maintain a broad array of competencies that depend on the needs of the patients and communities they serve. The scope of their practice is not defined by diagnoses or procedures, but by human needs. Family physicians do not treat diseases; they take care of people, giving special attention to the nodal points in the family life cycle, such as birth, serious illness, and the end of life. Family physicians are expert at managing common complaints, recognizing important diseases, uncovering hidden conditions, and managing most acute and chronic illnesses. They emphasize health promotion and disease prevention. They target their knowledge, skills, and attitudes at community practice, current developments in science, and continuous quality improvement. Family practice has a distinct clinical approach that requires special skills to identify concerns, focus issues, negotiate plans, and help solve problems. The recognition, integration, and prioritization of multiple interests and the synthesis of solutions are critical clinical competencies. The variety of human needs requires targeting the clinical process, sharing responsibility, and managing uncertainty. The family physician requires refined abilities to observe, communicate, understand, and care. Commitment to patients and populations involves activism and advocacy.

These skills need to be nurtured because ailments are usually seen by the family physician in their early, undifferentiated forms, with little resolution of their symptoms and signs, which make their diagnosis very difficult. This is often compounded by the very subtle differences in the early symptoms of serious diseases, as well as self-limiting illnesses and minor illnesses. For an inexperienced person, the clinical picture is identical, but to a Family Physician one symptom provides a lead to whether it is a serious illness or not. Diagnosis is usually on probability basis, guided by the epidemiology of the disease in the community. Infact, many patients will never be assigned a definite diagnosis, because symptoms may resolve before accurate diagnosis is made. Therapeutic trials can also be used to confirm the diagnosis. Practically, these could be time saving and cost effective, but for the purist physician, it will come under severe scrutiny.

A family physician sees a myriad of the patients as lucidly demonstrated in a paper on medical ecology published in the *New England Journal of Medicine* in 1961. The study shows that750 out of 1000 adults would come down with a disease or injury in the course of a month, but only 250 of them would be sick enough to see a doctor. Of the 250 patients seen by the family physician, three would be sick enough to require admission, five would need to be referred to another doctor while one of the patients would need to be referred to a university medical centre.

In its 2008 Annual Report entitled, *Primary Care Needed More Than Ever Now*, the World Health Organization stressed the need to strengthen primary care. It also emphasized that for equity, fairness and quality healthcare delivery, every seeker of health needs to see a physician at first contact and not anyone less. The United Kingdom (UK) Department for Health reports that an effective and efficient heath care system should be patient-centred,

affordable, responsive, accessible, guarantee coordination and continuity of care, and foster innovation. Undoubtedly, Family Medicine represents most of these. Now, does the Nigerian healthcare system need a primary gate-keeper? We did a research using the Embase and OVIDMEDICINE database on HealthCare Management Information Consortium(HMIC) search template. We found that the UK and Netherland had a robust primary gatekeeping care system. On the contrary, France and Germany had no effective primary gate-keeping in their health care system, so coordination and continuity of care remainchaotic. In Nigeria, there is no coordinated gate-keeping system as management and coordination of Primary Healthcare Centresare done haphazardly without qualified physicians in most of them. The study shows that the good health outcomes (especially in chronic diseases) that the UKhad were directly associated with effective primary healthcare. In France which had only 10% GPs in practice, primary gatekeeping showed that the unrestricted access to specialist care induced demand for costly and sometimes unnecessary services. The study, therefore, concluded that for Nigeria to achieve the MDGs, effective primary gate-keeping services must be integrated into the process of community development.

The contributions of primary care physicians to the maintenance of health and wellbeing in Bayelsa State would be better appreciated if the results of this study are transposed into the current situation in the State. Data from the Bayelsa State Hospital Management Board shows that 20 of the 24 cottage hospitals in the State have at least a medical doctor. There is no data on the actual population size served by these cottage hospitals, but we can assume that they serve the entire population of Bayelsa State, which is about 1,673,000. Using the data trend of the medical ecology study, the cottage hospitals would see about 409,250 patients every month, which is a heavy load to manage.

My Contribution to Knowledge in Family Medicine and Primary Health Care

Vice-Chancellor, Sir, when I was appointed a lecturer, one of the first to be so appointed, following the recommendation of the Medical and Dental Council of Nigeria(MDCN) in 2006 that Family Medicine should be offered at the undergraduate level, I saw the appointment as an opportunity to prove the expertise of family physicians in rigorous, collaborative research. This is particularly so given that the road to that MDCN recommendation had been a tortuous one. To accomplish this, I formed a research group with other family physicians and colleagues in other specialties of medicine. I am happy to say that this research group, was able to research and publish 41 research articles in local, national and international journals. The group has also published 12 patient-education leaflets and three full-length books that cover the more important health problems and provide practical guide for managing diseases.

The 41 articles published in learned journals covered the abuse of children and the elderly, alcohol use and abuse, clinical preventive services, crude oil spill, health care, and waste management and infection control. Other issues covered include maternal health, health economics, health care policy and management, public health and the environment, non-communicable diseases and the use of staple foods in the prevention and management of the non-communicable diseases. We also Published other periodicals such as policy briefs and manuals on project development and management, leveraging on the experience I had while working in the Office of the Senior Special Assistant to the President on MDGs (OSSAP-MDGs).

Vice Chancellor, Sir and distinguished audience, let me crave your indulgence by giving a brief summary of the significant findings of some of the research studies.

As we probably know, alcohol is the oldest and most widely used intoxicating substance known to man. In the Niger Delta region, alcoholic beverages are used for various social and religious activities. They are used to entertain visitors at engagement and marriage ceremonies and to signify the settlement of a quarrel. People drink alcohol during funerals and it forms an important part of ancestral worship, among other social and religious engagements. Moreover,, alcohol is used for personal hygiene, as the locally distilled gin is commonly used to cleanse the mouth at dawn. Many traditional people consider it a health tonic, and often recommends it as an aphrodisiac and for the treatment of cold.¹

However, alcohol consumption, according to the 2002 World Health Report, is linked to more than 60 different types of diseases and injuries, and responsible 3.2% of all deaths and 4% of the global disease burden measured in Disability Adjusted Life Years (DALYs). This is higher than the 3.7% attributed to poor water and sanitation and compares well with the 4.1% attributed to tobacco use. Most of the health problems associated with alcohol are linked to its abuse. The International Classification of Diseases (ICD-10) defines alcohol use as ingestion of alcohol in any form, and alcohol abuse as all forms of risk and malfunction associated with hazardous alcohol drinking. Given the widespread consumption of alcohol in the Niger Delta region and the fact that the people are often oblivious of the adverse health effects of alcohol, we decided to carry out a study to find out the pattern, prevalence and factors associated with alcohol use and misuse in a small, semi-urban community in Bayelsa State.

The study found alcohol consumption to be widespread in the community. In fact, more than 90% of the respondents reported the use alcohol in the preceding year, with most of them preferring the locally produced drinks. More than a third of respondents were classified as engaging in harmful drinking, while 12.73% had alcohol dependence problem. Persons with alcohol problems were

found to be more likely to be males, in polygamous marriages, more poorly educated, likely to be practitioners of the traditional religion, and more likely to be engaged in palm wine tapping.

In a follow-up study, also carried out in the same community, we tested the hypothesis that the high prevalence of all aspects of domestic violence recorded in the Niger Delta region in the 2008 National Demographic and Health Survey was probably related to the widespread consumption of alcohol in the area. The study confirmed this hypothesis as all forms of domestic violence were found to be significantly higher among persons and families with alcohol problem, while 77.2% of personally acknowledged domestic violence cases were reported to have been carried out under the influence of alcohol.

In a region like the Niger Delta with such a high level of alcohol consumption and where alcohol consumption is an important part of social and religious life, there are fears that pregnant women may not abstain from drinking, thereby exposing their unborn babies to the toxic effects of alcohol. This is against the background that alcohol consumption has been identified as one of the few modifiable risk factors for poor pregnancy outcomes. It is known to affect not only the quality of the baby but can also cause miscarriage, pre-term birth, and low birth weight. Fetal Alcohol Syndrome is best associated with alcohol consumption during pregnancy, but only forms a small proportion of Fetal Alcohol Spectrum Disorder (FASD), an umbrella term for the range of diagnoses which may result in a fetus who has been exposed to alcohol during pregnancy. The other diagnoses include the alcohol-related neuro-development disorder and alcohol-related birth defects, such as cleft palate. Persons with FASD often require medical treatment for their physical defects and mental disorders, special education for their cognitive and behavioural disorders, correctional (justice) services for the criminal behaviours that they may have, and social and family support for their ill health. The care of persons with FASD, therefore, requires the use of resources that spread well beyond the boundaries of the health care system and constitute a big drain to the economy. It is estimated that FASD cost the Canadian economy up to \$6.2 billion every year.

Despite the well-documented harmful effects on the unborn baby, there is, however, no concerted effort in the Nigerian health sector to discourage pregnant women from drinking alcohol, and thus protect the unborn child. We, therefore, decided to carry out a study to assess the magnitude of the problem among pregnant women attending the antenatal clinic of the University of Port Harcourt Teaching Hospital, Port Harcourt. In the study, we found that more than half (59.28%) of the respondents had taken alcohol during the index pregnancy, a third (39.40%) of whom drank alcohol on a regular basis, taking a weekly average of 6.5 ± 4.69 units of alcohol.

More than a quarter of the pregnant women were found to be binge drinkers. The level of alcohol consumption among these women is high, which is scary, considering the effects of the habit on their unborn babies. There is a need, therefore, for a massive health education campaign to change the attitude of the public and pregnant women in particular to acohol use. This should include inserting health warnings on alcoholic beverages, discouraging pregnant women from drinking the beverage or smoking, as is currently being done in some countries.

Vice Chancellor, Sir, missing data is a serious statistical problem in scientific research, and plagues almost every research study. The impact of missing data is significantly more in health economic evaluations involving patients' data. This is because such studies depend on the arithmetic mean, such that missing data can easily skew the results. Poor handling of the missing data can also introduce bias, and affect the reliability and validity of study, especially when it results in the over- or under-estimation of parameters. This is often not reported in most published studies, which seriously questions the validity of the inferences made in the studies. To find solutions to this very vexed issue, we carried out a meta-analysis of how missing data were handled in published papers on health economics. The review showed that Complete Case Analysis (CCA) was the most commonly used method for addressing this problem, mainly because it is a readily available software, and very easy to use. However, the use of CCA is on the

implicit assumption that the mechanism of missingness is completely at random(MCAR) and not missing at random(MAR) or not missing at random(MNAR). This implies ignoring missing data. The mean advantage of this is that all analysis are done with an original data set of subject, but its mean drawback is that its suitable for only a small proportion of data is missing and when pattern is univarate. The indiscriminate use of CCA could reduce sample size drastically and could lead to invalid inferences and reduced validity, especially if the deleted group is a select subsample and the proportion of missing data is large. Also, The CCA software cannot handle multivariate data. We concluded that researchers should explicitly understand how to deal with missing data and endeavour to use statistically valuable methods to handle missing data.

Vice Chancellor, Sir, breast cancer represents 10% of all cancers diagnosed worldwide and constituted 22% of all new cancers diagnosed in women in 2000, making it by far the most common cancer in women. The survival rate from breast cancer in developing countries is generally poorer than in the developed ones, and this is primarily as a result of delayed diagnosis of cases. Retrospective demographic regional studies have shown that most patients with breast cancer present for the first time at stages two and three. The most important and beneficial area of protection is the early detection of breast cancer (screening). Diagnosis of breast cancer during the early stages has been positively linked to a decrease in the mortality and morbidity arising from the illness. There are a number of approaches for screening breast cancer. This includes breast self-examination, clinical breast examination, and mammography.

Breast self-examination (BSE) has been endorsed and widely promoted by cancer control organizations and authorities around the world. Its effectiveness, however, is dependent on education and outreach among women, and upon conscientious and regular self-examination. Clinical breast examination is one of the primary modes of screening for breast cancer. Its effectiveness is dependent on the skills of the health worker and the facilities available. It is, therefore, important to use proven training strategies and standard techniques to ensure that health workers are fully and appropriately trained. Mammography is known to reduce breast cancer mortality among women, but its benefits are dependent on several factors, such as the equipment used, the skills of the technician taking the mammography and the expertise of the radiologist reading the mammogram. Cancer of the breast is the commonest cancer diagnosed in Nigerian women and worldwide. It is also a leading cause of death among women. The incidence has been on the increase in the past three decades. When breast cancer is diagnosed early, modern treatment has ensured some life elongation, increased years devoid of disability and reduced mortality. Early detection programmes allow for a more favourable prognosis for patients, offer better and less toxic
treatment options, and enable the provision of services through more cost-effective modalities. Early diagnosis of breast cancer is, therefore, critical in primary care. We, therefore,, assessed the knowledge andpractice of and attitude to breast self-examination among Niger Delta women. Of the 150 women we studied, 14% had no formal education; about 80% knew of breast cancer; 40% knew nothing about breast self- examination and 59.3% had never practised it, while 15% do so occasionally. We, therefore, concluded that there is poor awareness of BSE among women in the Niger Delta region, and therefore recommended ways to increase the awareness and practice of BSE. These include media campaigns, outpatient health talks, uptake of clinical prevention services, integration of clinical prevention packages service points and sensitization of women groups.

Vice Chancellor, Sir, one of the cornerstones of the practice of Family Medicine is clinical prevention. Clinical and community preventive services have proven to reduce the incidence, morbidity, disability and mortality from chronic communicable and non-communicable diseases. Clinical preventive services are currently available in most Nigerian tertiary hospitals but are provided at multiple service points, and by different specialist health professionals. The services are often poorly utilized because of lack of awareness, cost and poor attitude of people towards the service. Other factors include the fact that the clients are used to accessing medical care only when they are sick as well as the time lost and the inconveniences involved in accessing the required services from different service points in the hospitals. There are also indications that those who truly need the preventive clinical services might not obtain the services, as indicated by the inverse care law, hence the need to make an extra effort to aid the uptake of the services and prevent the exacerbation, rather than the narrowing of health inequalities.

Vice Chancellor, Sir, having noted this problem, we proposed and developed a framework for the social marketing of Clinical Preventive Services(CPS), to help increase the uptake of the services in Nigeria. The framework was created with data collected from libraries, electronic databases, and personal communications, which were used to gain an in-depth understanding of the clients; and to create a "marketing mix" of product, price, promotion, and place, for the social marketing project. The CPS was consequently packaged and branded as a single product, to be delivered in one service point, to make for easier access to clients; to be offered at subsidized price, to ensure its affordability to most Nigerians; to be promoted with messages that emphasize the immediate benefits of the services, even as the long-term goal is a long and healthy life; and designed to be provided as close as possible to where people live and work, not only in health facilities, but also in community events and facilities. We believe that the use of this framework in the social marketing of CPS would result in a significant uptake of the

services in Nigeria. The framework, when put into practice in the Patient-Centreed Medical Home(Primary Care Model), will reduce the fragmentation of clinical preventive services and integrate community or public preventive services into one whole. This will increase access, utilization and better outcomes.

We also need to cast a brief glance at the Niger Delta environment and weigh its impact on the effective delivery of health care to the people. We all agree that oil exploration and exploitation in this region have brought much oil wealth to Nigeria. But like most industrial activities, they produce= environmental hazards that are "slow poisons" in that they often take months and years for the diseases and deaths to manifest. This is unlike the contamination of water, food and the environment, with micro-organisms that immediately results in ill health. The covert and slow action of the hazards created by oil exploration and exploitation make it difficult to fully appreciate their contribution to the disease burden in Nigeria, especially in the oil bearing communities. This is not helped by the fact that the hundreds of post impact assessment (PIA) studies conducted every year, to assess the impact of the oil industry on the physical and social environment and on human health are conducted without any significant contributions from health professionals, and are reported without highlighting the immediate and long-term implications of the identified hazards, on the health of members of the impacted communities. This was sadly commented upon in the UNEP Ogoni environmental

assessment report; and is likely to continue because even the technical review of the impact assessment reports carried out by the Federal Ministry of Environment often do not include a health professional.

To highlight this problem, we published in different scientific journals a review article¹³ in which we provided the human health implications of the research carried out in the oil-bearing communities of the Niger Delta. We found that an average of 240, 000 barrels of crude oil are spilled into the Niger Delta environment every year, resulting in the contamination of surface water, ground water, ambient air and crops with hydrocarbons, including known carcinogens like Polycyclic aromatic hydrocarbons (PAH) and benxo(a)pyrene, Naturally Occurring Radioactive Materials (NORM), and trace metals that were further bioaccumulated in some food crops. We noticed that the oil spills resulted in a 60% reduction in household food security, and caused as much as 36% reduction in the vitamin C content of vegetables, and 40% reduction in the crude protein content of cassava. It was noted that these reductions were capable of increasing the prevalence of childhood malnutrition in the affected communities by as much as 24%. We also found that animal studies indicate that contact with Nigerian crude oil could be haemotoxic and hepatotoxic, and could cause infertility and cancer.

We also carried out a health evaluation of a crude oil flow station in a community in Rivers State. We found that most of the households in the community drank the water provided by the oil company, whereas the staff of the company drank bottled water; perhaps, warned against drinking the tap water, because of the high level of NORMs recorded in the ground water of the community by another study. Our study also found that the two-week prevalence of acute respiratory infection in the community was much higher than the national average of 2.8%, even when most of the households use electricity, a very clean fuel, for cooking. This might not be unconnected with the air pollution that is associated with the gas flaring of the flow station.

Vice Chancellor, Sir, we did not carry out our research studies only in the communities; we also carried out studies in hospitals, especially on the management of health care waste and infection control in hospitals. Health care workers risk contracting several diseases as a result of their occupational activities and exposure to healthcare waste is one of the more deadly risks the health workers are exposed to. This partly explains the emphasis placed on the proper management of healthcare waste. Our studies showed, however, that health care wastes are often not properly managed in Nigerian hospitals mainly due to poor knowledge of proper waste management practices, non-enforcement of extant legislations and, most importantly, poor funding that virtually compelled the hospitals into disposing their waste in the nearest municipal dumpsite, against all national and international regulations on the management of hazardous waste.

We also found that the poor management of waste in the hospitals is responsible for the high incidence of needle stick injuries among the staff of the hospitals. The study we carried out in the University of Port Harcourt Teaching Hospital, Port Harcourt, showed that more than half of the clinical staff of the hospital had received at least one needle stick injury in the preceding 12 months, mostly through an attempt to recap used needles, and from carelessly exposed needles. This is scary considering that it is several times easier to get infected with HIV, from a needle stick injury than from having sex with an HIV positive person. It is also scary to note that hepatitis B virus is resistant to several commonly used disinfectants, and can survive in an injection needle for more than one week. This means that a carelessly disposed injection needle, used for a patient with hepatitis B can infect somebody after a week. It is important to note here that hepatitis B, like HIV is incurable, but is deadlier than HIV.

It is important to add that Hospital Acquired Infections (HAIs) are considered a major cause of mortality, morbidity and enhanced emotional stress among hospitalized patients. They also account for significant economic loss and additional burden on health care institutions. HAIs have plenty of untoward economic effects on the already constrained health budgets in countries worldwide. Infection rates are higher in transitional and developing countries than in developed countries and HAIs affect approximately 1.4 million patients at any point in time worldwide. HAIs and hospital-to-community transmitted infections are reported to be affected by hospital hygiene or infection control measures.

Our studies on hospital infection control were mainly to assess the infection control practices of health care workers, and the compliance of the health workers to the infection control policy of the hospital. These studies are very important because infections that follow surgical procedures often do not kill the patient, but have been noted to be a significant source of morbidity, emotional stress and financial cost to the affected patients and health care institutions. Studies carried out in several developed countries showed that SSIs result in an average of ten extra days of hospital stay, and add an additional £1,780 to the patient's hospital bill; even as the infections are directly linked to the death of at least five thousand patients in the UK alone, in spite of an expenditure of up to a billion pounds. We carried out our studies in the two multispecialty, University of Port Harcourt Teaching Hospital (UPTH) and Braithwaite Memorial Specialist Hospital (BMSH). We found that the introduction of a hospital infection control policy significantly improved the infection control practices of the health workers; and was able to reduce infection following surgery by up to 22.43%. We also noted that the proper observance of the infection control practices is encouraged with the adequate provision of required consumables. This is another reason for the

better funding of hospitals, and for the institution of a revolving scheme to ensure the provision of the consumables, in the required quantities.

I also like to observe that more than 30 years ago, Abdel Omran had in a series of articles proposed the epidemiological transition theory. In this theory, he predicted the displacement of infectious diseases by non-communicable diseases, as major causes of morbidity and mortality, as a community or country develops. This theory has since been confirmed in most countries of the world, including Nigeria. Several community surveys indicate that the prevalence of hypertension in Nigeria has increased from 11.2% in the 1990s, to 27.9% in 2010 in a rural community in the Niger Delta, and 22.6% in 2009 among a sub-urban Christian community in south-west Nigeria. Non-communicable diseases are also currently responsible for at least 20% of all deaths in Nigeria, and up to 60% hospital admissions in most tertiary hospitals in Nigeria. The epidemiological transition has been attributed to wholesale adoption of Western lifestyle, and has been noted to occur at a different pace in different segments of the community, influenced by how readily Western lifestyle is being adopted. We, therefore, postulated that the prevalence of non-communicable diseases would be low among the traditional rulers, since they are the custodians of the customs and traditions of our communities.²⁸We, therefore, proceeded to assess the prevalence of hypertension and its risk factors among the traditional chiefs of an oil-bearing

community in Rivers State. At the end of our study, we found that the prevalence of hypertension among them was 68.9%, which is more than double that of the general population. We attributed this high prevalence of hypertension to the large-scale adoption of Western lifestyle by the traditional chiefs, fueled by the lucrative contracts they get from the government and from the oil companies. Indeed, western lifestyle is promoted as a life of glamour and sophistication in most Niger Delta communities but has been recognized as unhealthy and abandoned by people of higher socio-economic class in the developed countries, who have reversed their cardiovascular morbidity and mortality by the action. Health promotion activities to stem the rising prevalence of hypertension should involve the retention of traditional activities such as wrestling and dancing which involve a lot of physical action.

Vice Chancellor, Sir, the non-communicable diseases are very much with us, and the World Health Organization estimates that the diseases would increase by 60% in2020, and are likely to triple in Nigeria and other sub-Saharan African countries in the next 50 years. The World Health Organization (WHO) has also projected a three-fold increase in the number of the patients of noncommunicable diseases that would require daily care in sub-Saharan African the next 50 years. This is a clarion call to action, as the diseases are caused by genetic, environmental and lifestylerelated factors that are not amenable to the current model of medical practice in Nigeria, but can be managed with clinical preventive services (CPS). Clinical preventive services are designed for healthy individuals, unlike most other services in hospitals, and include immunization, screening for hidden diseases, and behavioural counselling interventions that assist patients in adopting, changing, or maintaining behaviours known to affect health outcomes or health status.

We carried out a study to assess the knowledge, attitude and use of clinical preventive services at the University of Port Harcourt Teaching Hospital, Port Harcourt, as part of the formative research for a social marketing programme for the services. We found that whereas all the respondents of the study believed that CPS are effective in the prevention of non-communicable diseases, only 18.25% of them believed that CPS alone would be enough to prevent the diseases. Many of these respondents also believed in the efficacy of prayer, the use of holy water and anointing oil, and in the services of native doctors. The religious denomination of the respondents significantly affected their conviction on the effectiveness of CPS. This can be attributed to the ideologies of the religious denominations on disease causation and cure. Many religious groups in Nigeria believe that non-communicable diseases are the will of God, thereby giving minimal attention to their prevention and control, while several others believe in miracles and the potency of prayers and other religious rituals as their prevention and control solution. These beliefs have been shown to seriously affect the uptake of preventive services and,

therefore, need to be corrected. Significant success can be achieved with a collaborative effort involving the leaders of the religious organizations. We also found in this particular study that more than 65% of the respondents that accessed the CPS did so because of the symptoms presented or the concerns shown by their friends or relations. This shows that people would rather wait for symptoms of ill health before accessing the services, which is dangerous with most of the non-communicable diseases, especially cancers that only begin to cause illness when they are already advanced.

This public attitude has to change if CPS is to serve their full role in preventing the emerging non-communicable diseases. The attitudinal change can be accomplished by promoting regular periodic health checks, as is common in the developed countries³⁶. The study also showed that about a third of the respondents who knew of the existence of the CPS failed to access the services for fear of receiving a positive result. This is a very real concern as a positive result easily pushes the patient to the diseased state, and into a life of morbidity and disability, resulting in a state of grief. Effort stargeted at improving the uptake of the services must work to remove this fear by offering hope and support, emphasizing the benefits of early diagnosis and treatment of the non-communicable diseases, and ensuring the linkage of the clinical preventive services with therapeutic services, as is currently being done with HIV&AIDS.

Vice Chancellor, Sir, I am happy to report that we also carried out research studies on the possible use of our staple foods in the prevention and/or treatment of the non-communicable diseases. For example, we explored the chemical contents that some of our food products have as a way of determining the quantity to prescribe to our local patients. In carrying out these studies, we were encouraged by Strong et. Al. who advised that the search for the treatment of the non-communicable diseases should go beyond the health sector and probe into other sectors of the society, particularly those that drive the structure and function of the society. We were also encouraged by the ancient Asian concept that "food and medicine are one". We, therefore, proceeded and carried out studies on how palm oil, palm wine and cassava can be used not only in preventing the non-communicablediseases, but also in treating the diseases. We found that palm oil contains 50% saturated fatty acids, which have been shown in several studies to result in a significant decrease in the prevalence of hypercholesterolemia and coronary heart disease. In Mauritius, the mean population serum cholesterol level fell from 5.5 mmol/l to 4.7 mmol/l in five years after the substitution of palm oil with soybean oil, as the predominant cooking oil in the country and coronary heart disease is believed to be uncommon in societies with mean serum total cholesterol concentrations of less than 4.6 mmol/l.It was estimated that a 1% reduction in the consumption of saturated fat in the 15 European Union countries and its replacement with equal proportion of monounsaturated and

polyunsaturated fat would lower blood cholesterol levels by about 0.06 mmol/l; resulting in approximately 9800 fewer coronary heart disease deaths and 3000 fewer stroke deaths each year. A meta-study also revealed that each 5% energy for which saturated fat is substituted with polyunsaturated fat could result in a 10% decrease in the risk of coronary heart disease.

However, that palm oil would be very difficult to abandon in Nigeria, because it would put millions of persons in Nigeria at risk of unbalanced diet. It is estimated that an annual consumption of 20-24kg of edible fats and oil is required to meet the WHO dietary recommendations. This would be difficult to meet without palm oil in Nigeria, especially in southern Nigeria where several people subsist on a diet of cassava, yam and vegetable, with little meat and fish. Besides this, palm oil is a valuable source of vitamin A, vitamin E and several other phytonutrients. Vitamin A deficiency is estimated to affect 190 million preschool-age children and 19 million pregnant women in the world, including several persons in Nigeria;⁴⁴ and palm oil is the richest naturally occurring source of beta-carotene, containing up to 800 mg of provitamin A carotenoids/kg oil, which is 15 times higher than the carotenoid content of carrots, on a weight-by-weight basis.⁴⁵ The bioavailability of the vitamin A in palm oil is so high that its ability to reverse vitamin A deficiency has been found to be comparable to the vitamin A capsules used in clinical setting. Vitamin E and the other anti-oxidant contents of palm oil have been shown to have

anti-aging and anti-cancer properties, enough to be considered for therapeutic purposes. Tocotrienols have been found to be effective alone, and in combination with tamoxifen, in the treatment of breast cancer.

Considering the nutritional value and the sentimental attachment to the use of palm oil as cooking oil in Nigeria, the abandonment of palm oil, as suggested in Western countries, won't be a viable option; the best alternative is to find a way of reducing the saturated fatty acids content of the oil. Thankfully, the technology for achieving this already exists and includes genetic engineering and the fractionalization of the oil. The fractionalization of palm oil is particularly easy to carry out, because palm oil is a mixture, and thus can easily be separated into its component fatty acids, using the different melting points of the fatty acids. The melting point of fatty acids increases with the length of the hydrocarbon chain and decreases with the number of double bonds. Unsaturated fatty acids have lower melting points, because they contain more double bonds than the saturated fatty acids. They are thus more likely to be liquid at Nigeria's ambient temperature. Palmitic acid, the main saturated fatty acid in palm oil, on the other hand, is mostly semi-solid at Nigerian ambient temperature, because it lacks double bonds and has a long carbon chain. This difference in melting points means that palmitic acid can easily be filtered out, by allowing it to solidify and settle to the bottom, even at Nigerian ambient temperature.

Vice Chancellor, Sir, we found that palm wine, the original alcoholic beverage of our ancestors, serenaded in several folksongs, and celebrated in several African novels is much more than a social lubricant, because it contains polyphenol in a concentration that is comparable with those of conventional wine. This means that regular intake of a moderate quantity of palm wine can be protective against the emergent non-communicable diseases, and capable of recreating the French paradox that shielded the French from several non-communicable diseases, in spite of their high saturated fat diet.⁵⁰Palm wine also has several other health benefits, including being a good rehydration fluid, with its excellent composition of potassium and magnesium; its ability to cause up to a 21.8% decrease in gastric acid secretion, which makes it benefit for certain peptic ulcer patients; and its antisickling properties, and its ability to reduce the osmotic fragility of the sickle cell, which can be beneficial to patients with sickle cell disease.

We also found that the often unappreciated cassava products can be reprocessed, and made the fulcrum for the prevention and treatment of the non-communicable diseases. Cassava contains deadly cyanogens, rich only in carbohydrates and grossly deficient in other nutrients, but an average Nigerian consumes 120kg of cassava products every year. These have been linked to malnutrition, konzo, goitre and tropical ataxic neuropathy; which can be prevented if the cassava is enriched with the deficient nutrients, possibly using genetic modification, and fermented for at least three days. Cassava-based staples also have moderate Glycaemic Index, and, therefore, may not be ideal for diabetic patients. They can, however, be made better by re-processing them to retain more chaff, dehydrating the wet variety, and eating them with soups rich in leafy vegetable. The cassava staples can also be made to better by storing them in packages that limit the growth of pathogenic micro-organisms, and marketing in forms that are convenient for the urban population.

Books

Mr Vice Chancellor, Sir, it is not enough to carry out research, it is more fulfilling to apply the findings of the research in solving the problems of the society. According to Goethe, "Knowing is not enough; we must apply". This statement is so important to researchers who strive to contribute positively to the growth of the society that it was made the motto of the National Academy of Sciences. I wholeheartedly subscribe to this, and have worked with my research partners to convert most of our research findings into 12 patient-education books, in a series we aptly titled "101 Ways of Health and Longevity Series". I crave your indulgence to provide more information about some of these patient education books.

The book, *How To Quit Smoking: A Complete Guide* was written to provide smokers with apractical guide on how to stop smoking. Apart from nicotine, cigarette smoke contains more than 4,000

harmful chemicals that have been linked to several diseases, premature death, sexual impotence and infertility. Cigarette smoking is now recognized as the single, largest avoidable cause of ill health and premature death in the world. Each cigarette smoked is believed to cause enough health damage to reduce the smoker's total lifespan by up to twenty minutes; and the World Health Organization estimates that cigarette smoking is responsible for the death of 4.9 million persons every year in the world, constituting about 8.8% of all deaths. While the number of smokers in developed countries are declining, the number in developing countries such as Nigeria has continued to increase, mainly due to the unscrupulous actions of the cigarette companies, and the near total lack of smoking cessation programme in the health care delivery system.

Quitting is the best option available to a smoker, as it is able to reverse nearly all the health hazards associated with smoking. But, Nigerian smokers are virtually on their own in their bid to quit smoking and live! They are merely told by their doctors to quit smoking to allow for a lifesaving procedure or when their health is at risk, when it is almost impossible to do so without assistance. This on-your-own attitude has pushed some of the smokers into seeking help from questionable sources, using potentially harmful methods. Smoking is both an addiction and a lifestyle, which make it very difficult to quit. Studies indicate that only about 7% of smokers are able to successfully quit smoking, by using will power alone, but significant success rate has been achieved by packaged smoking cessation programmes using counselling, nicotine replacement therapy and motivational methods. This is the regime currently being used by the UK's NHS Stop Smoking Service, and the several smoking cessation programmes sanctioned by the US Center for Disease Control and Prevention,³ which we have adapted in the book *How To Quit Smoking: A Complete Guide* to serve the Nigerian cigarette smoker that desires to successfully quit the deadly habit.

Another book, *101 Ways to Permanently Lose Weight For Beauty, Health And Longevity* was written to provide obese persons with the knowledge and skills to permanently lose weight and gain from the myriad of benefits that flows from losing weight. This is because excess weight kills over 2.6 million persons every year and is responsible for more than 30 different diseases, including diabetes, hypertension, heart disease, infertility, liver disease and cancer.¹ About 30% of Nigerians residing in urban centres are either obese or overweight, and studies indicate that these numbers are likely to double in the next few decades. This projected increase in the prevalence of obesity and overweight populations would result in a corresponding increase in the prevalence of the obesity-related health problems.

There is an urgent need, therefore, to take concrete action to tackle the obesity epidemic, which unfortunately has not been given the desired attention in the Nigerian health system, thus creating a vacuum that has been dangerously filled by charlatans who peddle all kinds of weight loss regimes. Most of these regimes are not only ineffective, but put the health of the patients at risk with their unbalanced, monotonous diet that predispose the patient to malnutrition, and their excessive emphasis on strenuous exercises that have resulted in several injuries and some cardiac arrests.² Studies also indicate that these weight-loss regimes are difficult to follow beyond a few weeks, which prompted a patient to exclaim "the second day of a diet is always easier than the first; because by the second day, you are off it". However, weight loss programmes based on achieving calories deficit, using balanced diet and increased physical activity, and delivered taking into consideration the relevant behavioral change and communication theories have been found to be very effective. We tried to incorporate all these international best practices in the book 101 Ways to Permanently Lose Weight For Beauty, Health And Longevity, the effectiveness of which has been acknowledged by the readers.

Kola Mariam, one of such readers, sent me a comment that shows our claims are not false. She said, "... I have read this your book and commenced practising it; frankly, I am seeing results; it's so practical." The most comprehensive of our patient-education books is *101 Ways to Live A Long and Healthy Life with Diabetes* that was written to teach diabetic patients what to do about the disease, when to do it, and how to do it, without the assistance of health workers. These constitute what diabetic patients are taught in the Diabetes Self-Management Education programme, an educational programme that has been shown to be capable of adding at least five extra quality years to the life of the diabetic patient³ and able to reduce the money the patient spends on treatment by up to 800%.⁴ Studies also show that doctors managing patients that attended a Diabetes Self-Management Education have greater job satisfaction and lesser burnout rate because of the significantly lower incidence of such emotionally draining complications of diabetes as amputation, blindness and stroke among the patients.

Our decision to write this book followed the finding that diabetic patients in Nigeria do not have access to a properly packaged Diabetes Self-Management Education Programme. This lack is the main reason why people die from the chronic complications of this disease that rarely kills any diabetic patient in the developed countries. This unacceptable reality is so repulsive to the International Diabetes Federation, a global association of health workers and diabetic patients, that it considers it a fundamental right that must not be denied any diabetic patient.⁴The Foundation also considers it an unethical practice for a doctor to manage a diabetic patient without ensuring that the patient goes through a Diabetes Self-Management Education Programme.⁵

We tried to solve this problem by adopting the features of the best Diabetes Self-Management Education programmes in the world, and then adapting them to serve the needs of Nigerian diabetics for:

- Healthy diet, based on the traditional cuisines,
- Physical activity regime that is not a stand-alone, but blends comfortably into occupational, religious and social activities; and
- Drug management that recognizes the peculiar handicaps of the patient, and Nigeria's defective drug supply system.

We have incorporated all these perspectives into the book *101 Ways to Live A Long and Healthy Life with Diabetes* for the private education of the patient, as we work to conclude the logistics for a formal Diabetes Self-Management Education programme.

Development Work

The Office of the Senior Special Assistant to the President on MDGs (OSSAP-MDGs) was set up to coordinate the efforts of all three tiers of the Nigerian government towards achieving the MDGs. The coordinating activities of OSSAP-MDGs was very necessary because, although the States and Local Governments are closer to the community, and are therefore in better position to implement the MDGs projects, they however lack the fiscal strength of the Federal Government and the access to a broad range of external technical assistance and best practices that are available to the Federal Government. The OSSAP-MDGs pooled these

resources for the successful execution of projects and programmes aimed at attaining the MDGs.

The OSSAP-MDGs had a budgetary funding from the Debt Relief Gains of about US\$750 million (for federal projects) that became available annually when Nigeria was granted debt relief by the Paris Club of Creditors in September 2005. A substantial proportion of the budget available to OSSAP-MDGs were used to fund interventions and projects in its flagship programme, the Conditional Grants Scheme (CGS).

The Federal Government provided 50% of the total cost of high impact, pro-poor projects identified by members of the benefiting community, and approved by a technical committee made up of staff of OSSAP-MDGs and the technical partners of the scheme; while the remaining 50% of the funding of the projects was provided by the State Government and/or Local Government of the benefiting communities. The Federal Government, therefore, leveraged funds and reduced the fiscal constraints faced by the three tiers of the Nigerian government, thus enhancing the speedy execution of targeted MDGs projects and programmes. It also ensured community ownership and sustainability of the executed projects; empowered state and local governments to carry out their constitutional responsibilities; improved public service delivery; and encouraged improvement in public expenditure reforms.

Vice Chancellor, Sir, in 2012, the university graciously approved my secondment to the Office of the Senior Special Assistant to the President on MDGs (OSSAP-MDGs), where I first served as the Desk Officer for Health, and then Head of the Conditional Grants Scheme (CGS) Unit. I am greatly indebted to my colleague and friend, Dr. Precious Kalamba Gbeneol, for the confidence reposed in me, and to the University for giving me the opportunity to take up the posting. The secondement afforded me the opportunity not only to acquire very useful field experience of large scale surveys(research) and provision of pro-poor projects, but also provided the platform for the expression of my training in family medicine and health economic/policy, outside the confines of the university and hospital. It is also gratifying to note that this appointment, contrary to expectations, did not greatly distract me from carrying out research rather it gave me the favorable circumstance to be part of large scale research and development platform(real time experience of using data for effective planning and implementation of development). In fact, the period of the appointment was perhaps my most productive research period, as I did not only enable me to carry out research in the health sciences and development, but also applied the research skills I had developed in the university to every aspect of my work. I was fortunate to be an active player in three major research process, one initiated by the unit before me(NMIS), two iniated and coordinated by unit when I was head(DRG Intervention Mapping and MSD).

The Nigerian MDGs Information System

In an effort to ensure ownership, leaverage more funds for MDGs and build collaborations, the Office of the Senior Special Assistant to the President on the Millennium Development Goals (OSSAP-MDGs) created the Conditional Grants Scheme (CGS). Through this scheme, matching grants are given to States and Local Government Areas (LGAs) to be used for execute approved projects and programmes geared to reducing the execution of poverty and improving education and health.

In order to support the CGS, and as part of their goal to promote the use of data in the local planning process, OSSAP-MDGs undertook a rigorous, geo-referenced, baseline facility inventory across Nigeria in 2010 (113 LGAs) and 2012 (661 LGAs), with an additional survey to increase coverage in 2014. The aim of this survey effort was to collect data for all of the nation's health, education and water facilities. This data will ensure informed decision making and implementation in local, state and federal interventions aimed at achieving the MDGs. The end result is this online portal, the Nigeria MDG Information System (NMIS). Painstaking and quality assured research methodology was used, supported by information technology.

NMIS has proven to be an invaluable planning tool for States and Local Government Areas. In 2014, this ambitousdata initiative was openned the to the general public. It is developed and designed to be used by planners, researchers and the broader global development community.

This website therefore asks for the global community to participate in keeping this key national asset up-to-date with the latest health, education and water facility information.

The Deft Relief Gain Project/Intervention Mapping

In late 2012 there were cases of sparce observations of failure of some of MDGs projects across the country to meet their desired objectives and, therefore, sought have imperical data on the manignitude of the problem in other to profer sustainable solutions. We conducted a national survey/mapping of the MDG projects that were funded with the Debt Relief Gains (DRG) by stratification to themetic sector areas.We identified the problem sectors and also reasons for the failures, particularly for the water and sanitation investment area. We also found that the project failures were primarily due to lack of community ownership and participation as well as the inability of the beneficiaries to effect minor repairs. These encouraged us to develop a sustainability policy framework that enhanced community participation at all stages of the project cycle; the proper handover of the project to the benefitting community; the constitution of facility users committees, and a seed grant for facility users committees to ensure the sustainability of the project. It also led to the launch of the Citizen and Community Engagement protocol platform for effective project monitoring, complains and citizen participation.

The MSD Framework

We researched and found solutions to the problems that confronted our unit, which we published as working documents. We had problems with the completion and utilization of our projects, so we developed a Monitoring, Supervision and Data Collection (MSD) format; and pre-tested it with engaged stakeholders (IDPs, State actors, NGOs, etc), before using it in our project monitoring. The use of this tool significantly reduced our project attrition rate from the 45% recorded in the 2008/2009 projects to 7% for the 2011 projects.

Some of the research studies that were carried out in the course of my work as the head of the Conditional Grant Scheme for MDG projects are published in a special supplement edition of the <u>Port</u> <u>Harcourt Medical Journal</u>. I urge academicians who have the opportunity to hold elective or appointive positions to continue with their research work while discharging their responsibilities. This is one veritable way of developing research and development(R&D) to give a pride of place toevidence-based decision and policy direction.

Mr Vice-Chancellor, Sir, let me once again ask for your permission to briefly summarize the significant findings of the studies that were published in the special supplement edition of the *Port Harcourt Medical Journal*. At the dawn of the 21st century, world leaders met under the aegis of the United Nations to sign the Millennium Declaration, and set goals aimed at addressing extreme poverty in all its ramifications. The goalsset in the Millennium Declaration are now called the Millennium Development Goals (MDGs), and they were set to be met on or before 2015.

In a series of studies, we examined the problems of meeting the various MDGs in the Niger Delta, considering the varied and difficult terrain of the region. We took an inventory of the water facilities that were executed in the three core Niger Delta States of Rivers, Bayelsa and Delta State, and found that a total of 151 water projects were constructed in the three States during the period I headed the CGS, a yearly average of 16.77 projects. Most (78.57%) of the water facilities; those in Bayelsa State are mostly (87.69%) motorized water facilities without reticulation, while 13.64% of the water facilities are rainwater harvesters. These facilities are appropriate for the communities in which they are sited, and are therefore most likely to serve the water needs of members of the communities.

As at the time of the study, nearly all (91.79%) of the respondents believed the water facilities solved their water problem; 61.94% were satisfied with the quality of the water from the facilities; most (94.03%) had used the water facilities; while (55.60%) fetched water from the facilities on a daily basis. The water facilities

shortened the time spent infetching drinking water in the benefitting communities, and reduced the average two-week period of diarrhea prevalence in the communities.

A total of 413 health-related projects and programmes were executed in various communities, in the three core Niger Delta States of Rivers, Delta and Bayelsa States under my headship of the Conditional Grants Scheme, a yearly average of 45.89. Most (70.70%) of the projects were for the provision of medical equipment, drugs and other medical consumables; more than 10% of the projects were for the construction or renovation of primary health care facilities; 1.94% were for the construction of staff quarters for the PHC facilities; while 3.39% of the projects were for the fencing of the PHC facilities. A total of eightambulances were provided in thehealth facilities; while 10 medical outreaches were carried out. The number of health-related projects executed in these Niger Delta States shows the commitment of OSSAP-MDGs to the attainment of the health-related MDGs in the communities, which is very significant considering the difficult terrain and the poor security situation in the communities. The fact that most of the benefitting communities are rural is also significant, considering the low priority given to the rural communities in most other government policies and programmes.

Vice Chancellor, Sir, at the OSSAP-MDGs, we did not just build facilities, we also put systems in place to ensure the sustainability of the projects. These innovative systems were also outlined in some of the articles published in the special supplement of the *Port Harcourt Medical Journal*. We developed a triangulated approach for monitoring and supervising our funded projects. The triangulation involved the assessment of the projects by different actors, using different theoretical perspectives, methodological approaches, sources of data and methods of data analysis. This approach reduced the limitations of using a single strategy, provided a more trusted report and gave a comprehensive analysis of our projects.

The result of this is that we were able to complete most of our funded projects within three months. Our study showed that 16,768 (56.8%), out of a total of 29, 465 projects that were awarded under the Conditional Grant Scheme for local government areas between 2011 and 2014 were completed within the stipulated three-month period; there was no evidence of work at the designated project site in 17.1% of the projects; while only 0.3% of the projects were considered to have been abandoned by the contractors, at the end of the three-month period. This is very significant, considering that nearly all the projects are sited in rural communities that are known for their difficult terrain, poor security and nearly impassable roads. Our performance is also remarkable considering the slow pace of government projects in

the Nigeria and the high rate of abandonment of projects, especially as most projects were awarded to powerful politicians and their cronies.

We also set up community management committees to help in the operation and management of our projects; and we learnt useful lessons from the committees. We assessed the attitude to, and performance of, the committees that were set up to manage the reticulated water facilities in Rivers State; and we learnt that members of the benefiting communities were more positively disposed to the management committees, and more willing to pay a stipend for the operation and maintenance of the water facilities in communities in the mangrove swarm forest zone of the Niger Delta region where drinking water was harder to get. This emphasizes the need to ensure that a community really needs a project before it is sited there.

My Thoughts on the Growth and Future of Family Medicine in Nigeria

Vice Chancellor Sir, I have carried out research in a wide range of areas in the health sciences, but going forward, I want to use my chair as Professor of Family Medicine to work to lessen the onerous task of differentiating the undifferentiated. To accomplish this, I would like in the near future to pay attention to medical ecology, emergency medicine, the strengthening of the medical curriculum to reflect the key role of family medicine in achieving health for alland in increasing access to clinical preventive medicine to tackle the growing trend of non-communicable diseases. My thoughts on how these can be achieved are set out in the following list and brief notes.

1. Medical Ecology/ Geographically Defined Population Model

Primary care is the fulcrum of health care policies in the United Kingdom (UK). The GPs gatekeeping roles, including providing comprehensive care and continuity of care, are well appreciated. The core strengths of UK primary care remain universal registration with a primary care practitioner, relatively good access to primary care in terms of both distribution of GPs and speed of access, gate keeping to specialist care, lifelong primary care records of patients and care that is mostly free at the point of delivery. The primary care practitioners are responsible for a defined population which enables them to be held accountable for the quality of care they provide. This model is unarguably partly responsible for the quality of care noticed in the United Kingdom, especially in the management of chronic diseases and in achieving anincreasein DALYs/life expectancy.

Vice-Chancellor, sir, we can replicate this model of universal population-based primary care practice in Nigeria. My future research and advocacy would be to replicate this model of integrated, all-participatory primary care system, such that every person in Nigeria would have a Family Physician as a personal doctor.

2. Emergency Medicine/Referral Strengthening Models

In almost all health systems, prevention is the primary focus, but many health emergencies do occur in spite of this. A significant burden of diseases in developing countries is caused by timesensitive threatening ailments, ranging from road traffic accidents to haemorrhages to severe infections and dehydration. The provision of timely treatment during these life-threatening emergencies is, therefore, important in the successful management of the diseases. Emergency medical care is the much needed timely treatment for the time-sensitive life-threateninghealth problems. It entails quick medical decision-making, and prompt action taken, irrespective of the patient's age, gender, location or condition.

Moving forward, I want to dedicate some of my time in working to improve emergency medical care in Nigeria, especially in the nooks and cranies of the Niger Delta. I particularly would like to research and advocate a structural model that would strengthen emergency medical care from the time the emergency condition happens in even the remotest part of the Niger Delta region, during the transportation of the patient to the health facility, and up to the first contact hospital and referral centres.

3. Strengthening Medical Training Curriculum, Skills and Methods

With the advent of family medicine into the training curriculum of undergraduate medical students, there is a need to re-evaluate the traditional practice of training the medical students predominantly in tertiary healthcare institution where the diseases seen are markedly different from those in our various communities.

Going by the findings of the medical ecology study I had earlier quoted, in a community of 1000 persons, 800 would experience at least one symptom in a given month; out of these, 217 would be sick enough to consult a doctors, eight would require hospitalization, and only one would need to be referred to a teaching hospital. This represents an atypical sample size of illness for effective medical training. This manner of exposure causes unrealistic concept of the type of medical problems that are prevalent in the society, particularly those requiring primary care.

Vice Chancellor, Sir, I would work to develop models and frameworks to ensure that medical students not only in our university, but also in the whole medical schools in Nigeria are given the much needed community-related training.

4. Integrated Clinical Preventive Services Model

Clinical Preventive Services (CPS) – screening tests, immunizations, health behaviour counselling, and preventive medications – can save lives and promote well-being. Significant reductions in health disparities, mortality, and morbidity, along with decreases in health spending are achievable through Clinical Preventive Services. Inspite of these expected benefits,the uptake of essential clinical preventive services is currently suboptimal among adults, owing to a number of system- and office-based care barriers.To achieve maximum health results, prevention must be integrated across community and clinical settings, and made available in clinical or community settings.

Vice-Chancellor, Sir, there is a growing need for Clinical Preventive Services, even as the demand and provision of the services are poor. I would work hard in the next few years to develop a collaboration between primary care clinicians and public health physicians, to develop a Clinical Preventive Service package that would guarantee improved access to patients, quality service delivery and appropriate clinical follow-up.

5. Conclusion

Mr Vice Chancellor Sir, colleagues, special invited guests, ladies and gentlemen, to wind up this lecture I have, once again, shown that medicine in its characteristic way of disproving most mathematical and business success models have again questioned the practical business application of the "Pareto principle". If we focus on taking care of the 20%, what happens to the 80%?Will it be fair and equitable? It has also brought to the fore the serious questions in our health system and the need for serious reflection and deep thought for any action we take. Do we need to encourage generalist (liberalism) or fragmentation (conservatism)? Or do were need to strike a delicate balance? How do we do it to enhance equity, fairness, quality, and affordability to all? Are we going to tilt slightly towards liberalism, become centralist, or lean slightly to conservatism?

This lecture has also exposed the endless scope of the generalist doctor, and the effort made in Family Medicine to refocus the wide, wild generalist practice to become a patient and family centred care entity, thereby serving as a wonderful bridge between curative and preventive medicine, hospital care and public health, diseased organ and the whole person. While doing this, the lecture and the works there in have brought to the fore the pivotal role of effective Primary care in the improvement and sustainability of good health outcomes. This lecture has also evinced and advocated that every citizen of Nigeria needs to register with a family physician for health coordination, continuity of care and patient centred care. The need to shift the training of our future doctors to a more appropriate mix of hospital and community-based training/exposure is also underscored.

The lecture has also made evident the enormity of the work of a Family Physician in gatekeeping and differentiating the undifferentiated diseases, and the simplicity of what it takes to have good measureable outcomes in health. Most importantly, it has also testified to the invaluable role of research in the development of all facets of modern society.

Vice-Chancellor, Sir, I want to finally posit that if universal access to quality and affordable health is apanacea to equity and appreciable health for all in this 21st century, as prescribed by the World Health Organization in its2008 World Health Report, then Family Medicine and primary care is the way.

It has been my special privileged honour to have had your listening ear this past hour.

Thank you, and God bless.
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Seiyefa Fun-akpa Brisibe was born on 8 December, 1968, in Sampou town in present Kolokuma, to Chief Thompson Brisibe (a renowned disciplinarian and educationist) of Ekeremor/Ojobo extraction, and Madam ChristainaSondu (a successful teacher and trader) of Okoloba/Sampou extraction.

He started what can be called a nursery school at Papa Akara slate School in Amokoko-Lagos, before proceeding to State Primary School Okotiama in Gbaran clan in 1975, where he was specially taught by his mother to ensure that he becomes the best. He moved to State Primary School, Odoni, in primary five and it was here that he had his first school leaving certificate, not only because the primary school at Okotiama ended in primary five, but also because his mother was leaving to go to Teachers Training College.

He had one year of his secondary school education at River Nun Grammar School, Agbere-Odoni, before proceeding to Asoama Grammar School, Asoama, to be a boarder, where he wrote his WASC in 1985, not in science subjects as may be presumed, but predominantly in the arts/social science subjects. This was mainly because of poor career guidance and lack of science teachers in the secondary school. Even with the five credits he obtained in the 1985 WASC examination which qualified him to read accounting, he was determined to readmedicine. Hedid one academic year crash programme in the science subjects at the foremost private secondary school – Delta Career College, Warri, where he wrote the 1987 WASC examination and obtained four distinctions, including chemistry, biology and mathematics.

The young. Brisibe enjoyeda lot of goodwill from people throughout his primary and secondary school education in Okotiama, Odoni, and Asoama, because of his surname Sondu. Pa Sondu, his maternal grandfather, was until his death one of the most foremost Ijaw philosophical musicians and orators. This goodwill continued when he changed his surname to Brisibe, as he benefitted from the debt of gratitude owed his father and other members of the Brisibe family, who taught several persons, especially persons of Ijaw extraction, in secondary school and even in the university, and positively impacted on their lives. Prof. Brisibe is in no doubt that his surnames opened several doors for him; he was inspired by the names and worked very hard not to let the owners of the names down. He also feels he must replenish the stock of goodwill to ensure that his children and other Brisibes continue to enjoy the benefit of a good name. The sojourn of Prof. Brisibe in the medical profession started in 1987, when he wrote the JAMB examination of that year. He was not successful, but was instead given admission to read Physiotherapy in the University of Ibadan, which he declined, electing to repeat the examination in 1988. He convincingly passed the examination with a score of 268, and was given admission to read Medicine atthe University of Port Harcourt Medical School.

Prof. Seiyefa Fun-Akpa Brisibe graduated from medical school in December 1995 on time, being one of the 38 students from a class of 121 students admitted to read medicine in November, 1988. This further strengthened his conviction that started in his primary school days that one can succeed in academics with the right motivation, hard work, focus and prayer.

He joined the services of the University of Port-Harcourt Teaching Hospital in July 1998, as a Causality Officer (Emergency Medical Officer), after completing his compulsory internship and youth service from 1996 to 1998. He started his postgraduate residency training in Family Medicine in University of Port-Harcourt Teaching Hospital in 2001, passed all the prescribed examinations in record time, and was awarded the Fellowship in Family Medicine of the National Post-Graduate Medical College in 2007. He has since developed special interest in health maintenance, clinical preventive care and emergency medicine. In his crave to understand the economics of health care, he proceeded to the United Kingdom, from September 2008 to September 2009, on the scholarship of the Bayelsa State government, to do a Masters in Health Economics and Health Policy in Birmingham University. While in the United Kingdom, he also completed a diploma in Occupational Medicine, and had stars for two essays on public-private partnership and the economic evaluation of health interventions. He also developed special expertise in the course of his postgraduate studies on communicable disease modelling, priority setting, programme budgeting and marginal analysis, policy implementation and partnership, economic evaluation in health care and health care financing.

He joined the services of the Niger Delta University in Jan 2008, as Lecturer 1. He was promoted to the rank of a Senior Lecturer in October 2011 and was appointed to the rank of a Professor in December 2014. This meteoric rise through the ranks is largely thanks to his prolific research and publication in diverse topical health issues. As at 2015, he has written or cowritten more than 41 articles in local and international peer-reviewed scientific journals. Two of his articles on infection control have been cited over 200 times, such that he was approached by a German publisher for the articles to be developed into a book on hand hygiene and infectious disease control. Apart from the journal articles, Prof. Brisibe has contributed to and/or edited 11 manuals on development, including a monograph entitled, *The Conditional Grants Scheme: A Home-Grown Strategy For Accelerating The MDGs*. He has also written 12 health promotional materials, including three patient education books on smoking cessation, weight loss and diabetes self-management.

An all-rounder,Prof Brisibe has occupied lots of leadership positions in his professional association and the society at large. He was the Vice-President of the Association of Resident Doctors of the University of Port-Harcourt Teaching Hospital between 1998 and 2001, and became the President of the Association in 2002-2004,working hard during his tenure to improve the welfare of members of the Association.

He was the Secretary-General of the National Association of Resident Doctors, Nigeria, from 2001 to 2002, when he fought hard along with his colleagues to secure a 4% increment in the call duty allowance paid to doctors. He also held leadership positions in the Nigerian Medical Association (NMA), the umbrella association of all medical doctors in Nigeria. In 2004-2006, he served as the Secretary-General of the Rivers State Branch of NMA, a key member of the executive that commenced work on a permanent secretariat for the branch. He was an Assistant Secretary-General of the national body of NMA between 2006 and 2008; and was the Chairman of the Bayelsa State chapter of the NMA from 2010 to 2012, when he recorded many firsts.

Prof. Brisibe also held several leadership positions in thecourse of his work as a lecturer and consultant Family Physician. He was appointed in May, 2007 as the head of the Staff/NHIS clinic of the University of Port-Harcourt Teaching Hospital Port-Harcourt, as post part II senior registrar; and member of several committees such as the Drug Revolving Committee UPTH, Catering Committee UPTH, etc.

In 2009, he was appointed the head of the Department of Family Medicine, in both the Niger Delta University and the Niger Delta University Teaching Hospital, where he worked hard to put the two departments on a sound footing.

In 2010, he was seconded to the Office of the Senior Special Assistant on MDGs (OSSAP-MDGs) as the Desk Officer in charge of health, where he participated in the development of a protocol on the elimination of Vesico-Vaginal Fistula (VVF), and helped tracked the contributions of the MDGs budget in the activities of the Federal Ministry of Health, NHIS, NPHCDA and NACA.

He was made the Head of Conditional Grant Scheme (CGS) in the Office of Senior Special Assistant on MDGs in 2012. The Conditional Grant Scheme has since gaineda world acclaimedreputation for its effective partnership between the three tiers of government in Nigeria and for the coordinated implementation of MDG projects and programmes across the country. As head of the scheme, he was responsible for the coordination, disbursement and monitoring of all activities concerning its implementation. He expanded the partnership from projects and programmes executed by State Governments, to those located and chosen by the various Local Government Areas in the country.

He also introduced innovative projects and programmes into the Conditional Grant Scheme that were inspired by research and international best practices, resulting in the introduction of such specialized programmes such as the Village Health Workers Scheme, the Agriculture-based Micro-credit Scheme, Facility Users Management Committees, the Water Sustainability Framework, e-based CCT; and Monitoring, Supervision and Data Collection Framework. These innovations resulted in the astronomical increase in the completion and utilization of OSSAP-MDG funded projects and programmes, which directly improved the lives of over 70 million vulnerable Nigerians, most of whom live in rural areas. His headship of the CGS resulted in the completion of over 100,000 projects in the areas of health, water and sanitation, education and agriculture.

Prof Brisibe is a well-travelled man and has attended several local, national and international conferences and training, which have added a lot to his wealth of experience. These include the WONCA International Conference on Rural Medicine and Medical Practice in Calabar, in February, 2008; the World Social Safety Net Society Conference in Arusha, Tanzania, in 2011;

the United Nations Commission for the Status of women Conference on "Zero Violence on Women", in New York in February, 2012; the Study tour for Social Safety Net Interventions in Rio de Janeiro, Brazil in August, 2012; and at least eight UN Conferences in New York, Geneva, Bellagio, Italy and Rio de Janeiro, and Brazil. He was a member of the Nigerian delegation to United Nations General Assembly (UNGASS) in 2013 and 2014.

Below is a more detailed listing of the conferences he attended in the course of his professional career and during his public service:

November 2015: 18th Annual General Meeting and Scientific Conference of SOFPON. Abuja

September 2015: National postgraduate conference. Abuja

July 2015: Special Executive MBA Course in Metropolitan University UK in Dubai.

February 2015: Consultative Meeting on Sustainable Development(Goals)

UN-New York

March 2015: Consultative Meeting on Sustainable Development (Implementation).

UN New York.

January 2015: Consultative Meeting on Sustainable Development (Declaration), UN–New York.

March, 2014: United Nations Status on Women Commission. New

York, USA

June, 2014. Tour of Earth Institute University of Columbia

July 2014: United Nations Economic and Social Council Meeting. New York, USA

September 2014: Nigerian Delegation to United Nations General Assembly (UNGASS). New York, USA

January, 2013: Study Tour to the MDGs Centre West and Central Africa. Dakar, Senegal.

February, 2013: United Nations Millennium Campaign-Conference on Citizen Engagement Protocol Bellagio, Italy.

March, 2013: UN Commission for status of Women Conference on "Stop Women Trafficking".

March, 2013: Conference on CCT & Sustainable Development. Rio de Janeiro, Brazil.

April, 2013: Coventry University UK. Development Project Management Course.

July, 2013: Geneva, Switzerland. United Nations Economic and Social Council Meeting.

September, 2013: Nigerian Delegation to United Nations General Assembly (UNGASS). New York, USA

February, 2012: United Nations Commission for theStatus of Women Conference on "Zero Violence on Women", New york.

August, 2012: Study Tour for Social Safety Net Interventions in Rio de Janeiro, Brazil sponsored and facilitated by UNDP.

September, 2012: United Nations General Assembly. Presented Multi-Level Partnership Working in OSSAP-MDGs Side Event.

.2011: World Social Safety Net Society Arusha, Tanzania

April, 2010: Nigerian Medical Association Annual/Scientific Conference- Theme 50Years of Healthcare Development in Nigeria, subthemes: Medical Education and Research; Malaria& Tuberculosis – The Unending Challenges; The Emerging Diseases Including HIV/AIDS; Medical Tourism.

August 2009: Diploma in Occupational Medicine Course, Dept of Occupational Medicine, University of Birmingham.

February 2008: WONCA International Conference on Rural Medicine and Medical Practicein Calabar.

Prof Brisibe is a member of several professional and academic organizations, including the Nigerian Medical Association; the Medical and Dental Consultants Association of Nigeria; the Society of Family Physicians Nigeria; the American Academy of Family Physicians of America; Professional Alliance for Good Governance, Nigeria; Rural Health Forum; Honorary Life Member, National Association of Resident Doctors; Life Patron Rivers State Medical Students Association-UPTH; and the International Health Economics Association.

Prof Brisibe is happily married to his loving wife Barr. (Mrs) Beimonyo Brisibe "Anetorufa" to whom he remains grateful for her prayers, patience, support, care and love. They are blessed with three wonderful and inspiring children- Kiseye, Ibinabo and Pereere.

Vice-Chancellor, Sir, it is my singular honour to present to you Prof Seiyefa Funakpa Brisibe, Professor of Family Medicine; Consultant Family Physician; an inquisitive academician, astute administrator, husband to a lovely, intelligent and diligent wife, and father of wonderful children to present his inaugural lecture.

The research publications of Prof. Seiyefa Brisibe.

- Ordinioha, B., Brisibe, S., Okaba, B.Child abuse in semi urban communities in South-South Nigeria: The case of children accused of witchcraft. *Nigerian Hospital Practice* 2008; 2: 10-13.
- 2. Ordinioha, B., **Brisibe, S. F.** Clandestine abortion in Port Harcourt: Providers' motivations and perspectives. *Nigerian Journal of Medicine* 2008; 17: 291-295.
- 3. Ordinioha, B. **Brisibe, S. F.** Experiences and attitudes of young men towards abortion in a semi-urban community in Rivers State, Nigeria. *Port Harcourt Journal of Medicine* 2008; 3: 160–166.
- Ordinioha, B., Brisibe, S., Sawyer ,W. Elder abuse in a semi-urban community in South-South Nigeria. *Niger Delta African Journal of Health and Environment*. 2009; 3(2): 1–5.
- 5. Ordinioha, B., **Brisibe, S. F.** The management of health care waste in a tertiary health care institution in Port

Harcourt, South-South Nigeria. *Journal of Community Medicine and Primary Health Care* 2008; 21(1): 37–44.

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- 7. Brisibe, S. F., Onatai, L. O. A review of health economics evaluation methods of handling missing data in medical research. *Niger Delta African Journal of Health and Environment*.2010; 4(2) 14-21.
- 8. Alagoa, P. J., **Brisibe, S. F**. Knowledge, practice, and attitude to breast-self examination among women in a semi-Urban setting. *Niger Delta African Journal of Health and Environment*.2010;5(2)25-30.
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- **10.** Brisibe, S. F., Onatai, L. O.Does the Nigeria health care system need a primary gate-keeper? *PortHarcourt Medical Journal*. 2010;5(1)63-70.
- 11. Brisibe, S. F., Dienye, P. O., Eke, R. Sources of healthcare financing among surgical patients in a rural Niger Delta practice in Nigeria. *Rural and Remote Health* 11: 1577. (Online), 2011. Available from: http://www.rrh.org.au
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between alcohol abuse and intimate partner's violence in a rural ijaw community in Bayelsa State, South-South Nigeria. *J Interper Violence* 2012; 27: 513. DOI: 10.1177/0886260511421676.

- 13. Ordinioha, B., **Brisibe, S. F**. The human health implications of crude oil spills in the Niger Delta, Nigeria: an interpretation of published studies. *Nigerian Medical Journal* 2013; 54: 10-16.
- 14. Ordinioha, B., **Brisibe, S. F**. The prevalence of hypertension and its modifiable risk factors amongst traditional chiefs of an oil bearing community in South-South Nigeria. *Sahel Medical Journal* 2013; 14: 24-27.
- 15. Ordinioha, B., **Brisibe, S. F.**, Best-Ordinioha, J. C. A review of the dietary use of palm oil in Nigeria in an era of emergent non-communicable diseases. *Port Harcourt Medical Journal* 2013; 7: 95-104.
- 16. Ordinioha, B., **Brisibe, S. F**. The health evaluation of a crude oil flow station in South-South Nigeria. *Journal of the Nigerian Environmental Society* 2013; 7(4): 148-155.
- 17. Ordinioha, B., **Brisibe**, S. F. The human health implications of the environmental conditions and practices in some rural riverine communities of the Niger Delta, Nigeria. *Port Harcourt Medical Journal* 2013; 7: 123-132.
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- **19. Brisibe, S. F.,** Ordinioha, B. Socio-demographic characteristics of alcohol abusers in a rural Ijaw community in Bayelsa State, South SouthNigeria. *Annals of African Medicine* 10; 2011; 2: 189-200.
- 20. Ogaji, D.S., Okonkwo, E., **Brisibe, S. F.** Assessment of school health services in Calabar, South- South Nigeria. *Port Harcourt Medical Journal*, 2013; 17: 41-49.
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- 32. Gbeneol, P. K., Brisibe, S. F., Ordinioha, B. Knowledge,

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B. Patient education books.

- 1. Brisibe, S. F., Ordinioha, B. *How to Permanently Lose Weight for Beauty, Health and Longevity: A Complete Guide*. Preventive and Public Health Consult. 2013.
- 2. Ordinioha, B., Brisibe, S. F. *How to Quit Smoking: A Complete Guide*. Preventive and Public Health Consult. 2014.
- 3. Ordinioha, B., Brisibe, S. F. *A Long and Healthy Life with Diabetes Mellitus: A Step-by-Step Guide.* Preventive and Public Health Consult. 2015.
- 4. Brisibe, S. F. *The Conditional Grants Scheme- A Home-Grown Strategy for Accelerating the MDGs*. 2012

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INTERNATIONAL DEVELOPMENT RELATED)

- 1. Millennium Development Goals Conditional Grants Scheme Implementation Manual. 2012
- 2. Local Government Public Financial Management (PFM) Concepts, Processes & Systems Training Manual. **2012**
- 3. Mapping Nigeria's Debt Relief Gains. **2012.**
- RevisedLocal Government Public Financial Management (PFM) Concepts, Processes & Systems Training Manual. 2013
- 5. Conditional Grants Scheme to Local Governments Training Manual. 2013, Vol. 2; 4: 31-42
- 6. Conditional Grants Scheme to Local Governments Training Manual. 2013, Vol. 2; 5: 89-101
- 7. The 2011 CGS to 113 LGAs Comprehensive Project Implementation report. **2013.**
- 8. The 2012 148 CGS To LGAs comprehensive project monitoring, supervision and data collect report.
- 9. The 2012 CGS to State Comprehensive MSD report.
- 10. The 2013 CGS to 210 LGA comprehensive MSD report.
- 11. The 2013 CGS to State Comprehensive MSD report.
- 12. The 2014 CGS to State and LGA comprehensive MSD report.

- 13. Policy Framework for the Implementation of the MDGs Grants to Agro-Based Cooperative Societies.
- 14. Water sustainability framework for MDGs community water facilities. 2014

NIGER DELTA UNIVERSITY INAUGURAL LECTURE SERIES

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