

PROFESSOR GILBERT OBIAFO ONUAGULUCHI: PIONEER IN BASIC AND CLINICAL PHARMACOLOGY

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SUMMARY

Professor Gilbert Obiafo Onuaguluchi (Licentiate, L.S.M, Nigeria 1951, B.Sc. in Physiology of the University of London 1955, MRCP Edin., FRFPS, Glasg., Ph.D. Glasg. 1962) was born on 01 January, 1927. He was appointed Senior Lecturer at the Department of Pharmacology and Therapeutics, University of Ibadan and Consultant Physician, University College Hospital, Ibadan, in June 1962. He was the first African member of the academic staff of the Department of Pharmacology and Therapeutics. He rose to the rank of Professor in May 1965. A rather obscure icon, this brief exposition on him was put together from diverse sources of writings on him found at the Aqueduct of Adeloye, the medical school at University of Nigeria Nsuka, and on the internet.

Biography: Professor Onuaguluchi, Gilbert Obiafo was born on January 01 1927 at Awgu in Awgu, Enugu, Nigeria, the son of Daniel Ekekwtelere and Beatrice Okwualaru (Ofoezie) Onuaguluchi. He attended the Denise Memorial Grammar school, Onitsha, from 1941 to 1944. Had his higher education at the Higher College, Yaba Lagos from 1945 to 1946. He attended Medical School, Yaba, from 1947 to 1948. From its inception to 1936, the Yaba Medical School's curriculum involved a four-year medical course. The first one and a half years were devoted to basic sciences at Yaba Higher College. One year of pre-clinical studies at the medical school followed. Finally, a clinical course of one and a half years was spent at the African Hospital (presently General Hospital) Lagos. An examination for the medical assistant certificate was held at the end of the four-year training. The Yaba Medical School went through a lot of changes in curriculum and degrees awarded. Major challenges, including severe shortage of staff, made it difficult to

attain the objectives for which the school was founded. In 1948 the government decided to shut the Yaba medical school and move the last batches of students to the newly founded medical school at Ibadan.

Professor Onuaguluchi was transferred along with others to the University College, Ibadan to complete necessary clinical postings, required by the Yaba curriculum to be registered as a medical practitioner in Nigeria. He completed his clinical postings at the Adeoyo State Hospital which served as the teaching hospital of the University College, Ibadan. He finished and was awarded the Licentiate of the School of Medicine (LSM), Nigeria in 1951. He was registered as a qualified medical doctor in June 1951. He was then posted by the Government to Northern Nigeria, where he worked as an Assistant Medical Officer at the Kano General Hospital.

The Kano medical school started with twelve students in April 1955 with most of the students coming from



Professor Gilbert Onuaguluchi (younger and older)

Ilorin and Kaba provinces. The preclinical years were spent at the Infectious Diseases Hospital in Kano city. Physiology teachers included Dr W.E. Merret, who was Principal at Yaba, an English man called Dr Pollock and a Dr from Malta, Dr Zoreb. Professor Onuaguluchi was brought in as a teacher of physiology to augment physiology classes being delivered at that time by Dr Zoreb. Before then he was enrolled at the University of London for a B.Sc program in Physiology. Professor Onuaguluchi was seconded to the Infectious diseases hospital to assist with the teaching of Physiology in 1958. He thought physiology for three months before travelling to the United Kingdom for further studies. Professor Onuaguluchi attended the West London Hospital Medical School in 1955, Institute of Chest diseases, University of London, January to June 1956. He obtained the Bachelor of Science in physiology of the University of London in 1955. Professor Onuaguluchi taught Physiology at the Kano Medical School for three months before leaving for the United Kingdom to pursue a Ph.D program in Neuropharmacology in 1958. Not long after this, the Kano Medical School was closed in 1959.

His Doctoral training was done at the University of Glasgow, Scotland, from 1959 to 1961. He obtained the Doctor of Philosophy (PhD) in Neuropharmacology, University of Glasgow, Scotland, in 1962. Onuaguluchi returned to Nigeria to pick up the position of Senior Lecturer at the Department of Pharmacology and Therapeutics, University of Ibadan, Nigeria.

The Faculty of Medicine at the University of Ibadan started in 1948 when the University College of Ibadan opened with the three faculties of Arts, science, and Medicine. On November 20, 1957, the University College Hospital, Ibadan was declared opened by Her Royal Highness, The Princess Royal, with Professor Beatrice Joly, Foundation Professor and Dean of the faculty of Medicine overseeing the affairs of the Hospital. The Department of Pharmacology and Therapeutics was founded in 1952. The department started with one teaching laboratory and two offices located at the main campus of the University. The first pharmacologist to arrive was Dr J.L. Broadbent, MD, who came from Leeds in 1951. He was based in the Department of Medicine but delivered all pharmacology lectures until 1956 when he was joined by Dr. H. Schnieden, MD. Schnieden was transferred from the Department of Physiology to assist Dr Broadbent in Pharmacology. Dr Dinah M. James was appointed in 1958 and succeeded Schnieden to become the first professor and head of the Department of Pharmacology and Therapeutics, University of Ibadan in 1965.

Professor Onuaguluchi was appointed Senior lecturer at the Department of Pharmacology and Therapeutics University of Ibadan and Consultant Physician, University College Hospital Ibadan, in June 1962 to April 1965. He was the first African member of the academic staff of the Department of Pharmacology and Therapeutics. He rose to the rank of Professor in May 1965 and was professor at UI until 1966 when he moved to the University of Nigeria, Enugu.

The University of Nigeria at Nsukka was established in 1960; however, its Faculty of Medicine was not launched until early 1967. The Enugu Medical School drew its founding fathers from Ibadan. Its first dean was Professor H.C. Kodilinye who was until then Professor and Head of of the Department of Ophthalmology at the University of Ibadan. Professor Onuaguluchi left the Department of Pharmacology and Therapeutics, University of Ibadan in December

Table 1: Foundation Heads of Department of Pharmacology and Therapeutics, University of Ibadan

1958 - 1957	J.L. Broadbent	MB.CH,B, M,D
1957 - 1962	H. Schnieden	M.D
1962 - 1972	Dinah M. James	M,Pharm., Ph.D

1966 to pick up the position of Professor and Head of Department, Department of Pharmacology and Therapeutics, at the University of Nigeria, Enugu. He was consultant physician at the Specialist Hospital, Enugu. He was also associate Dean of the Faculty of Medicine at Enugu (1967 – 1970), under the Deanship of Professor H.C. Kodilinye. He held the position of Professor and Head of the Department of Pharmacology and Therapeutics at Enugu from January 1967 to September 1975. He was also appointed Dean of Faculty for a brief period (1970 – 1972), remained Head of Department (1972 -1975) before leaving to become the Vice Chancellor of the University of Jos in October 1975. A position he held from 1975 to 1978. Professor N.C. Nwokolo succeeded Onuaguluchi as Dean of Faculty at Enugu. The University of Jos began as a campus of the University of Ibadan in November 1971, with Professor E.A. Ayandele of the Department of History as the first Acting Principal. In October 1975 the institution became a full University and Professor Onuaguluchi was appointed as its first Vice-Chancellor. In 1976, the University was reorganized and the students were spread over four faculties; Arts and Social Sciences, Education, Natural Sciences and Medical Sciences. Post-graduate programs were added in 1977 and by 1978 Faculties of Law and Environmental Sciences were established while the Faculties of Arts and Social Sciences were separated.

Publications: Professor Gilbert Onuaguluchi, a physician-pharmacologist conducted research and wrote articles spanning a wide area of Basic and Clinical Pharmacology. His Doctoral Thesis (of the University of Glasgow) was on Clinical and Pharmacological Studies in post-Encephalitic Parkinsonism, in which he described extensively his findings in six chapters. In chapter one, he gave a general overview of Parkinsonism. In chapter two, he described crisis in post-Encephalitic Parkinsonism. In chapter three of the thesis he described drug therapy in crisis of post-Encephalitic Parkinsonism. In chapter four, he described the results of studies he conducted under the title 'electroencephalogram in post-encephalitic

Table 2: Professor Gilbert Onuaguluchi's Publications Listed on PUBMED

Year of publication	Author(s)	Title
1960	Onuaguluchi GO.	Clinical observations on snakebite in Wukari, Nigeria. ¹
1961	Onuaguluchi GO.	Crises in post-encephalitic Parkinsonism. ²
1961	Onuaguluchi GO.	Drug therapy in the crises of postencephalitic parkinsonism. ³
1963	Onuaguluchi GO.	Assessment of drug therapy in Parkinsonism. ⁴
1963	Onuaguluchi GO, Llewiss J.J.	Some aspects of the pharmacology of orphenadrine. ⁵
1964	Onuaguluchi GO.	Anti-ascaris activity of certain extracts from the bark of <i>Polyadoa umbellata</i> (dalziel) (erin-yoruba). ⁶
1965	Onuaguluchi GO.	Orphenadrine Hydrochloride - A possible antidote to Suxamethonium. ⁷
1966	Onuaguluchi GO.	Some aspects of the pharmacology of piperazine citrate (Antepar) and of the anti-ascaris fraction of the ethanolic extract of the bark of the erin tree (<i>Polyadoa umbellata</i> -Dalziel). ⁸
1966	Onuaguluchi G, Adi FC.	Some of the problems in the diagnosis and management of tuberculosis in Nigeria. ⁹
1966	Onuaguluchi G, Akande EO.	Severe crises with jaundice in young non-pregnant adults with sickle-cell haemoglobin-C disease. ¹⁰
1975	Okonkwo PO, Onuaguluchi G.	Proceedings: In vitro studies of puff adder (<i>Bitis artertas</i>) venom. ¹¹
1977	Okonkwo PO, Onuaguluchi G.	Pharmacological and biochemical studies of puff adder venom. ¹²
1981	Onuaguluchi G, Tanz RD.	Cardiac effects of amrinone on rabbit papillary muscle and guinea pig Langendorff heart preparations. ¹³
1983	Onuaguluchi G, Tanz RD, McCawley E.	Electrocardiographic changes induced by amrinone in the isolated perfused guinea-pig Langendorff heart preparation. ¹⁴
1984	Onuaguluchi GO.	Effects of piperazine citrate and of the anti- <i>Ascaris</i> fraction of the ethanolic extract of the bark of <i>Polyadoa umbellata</i> (erin) on mammalian non-vascular smooth muscle. ¹⁵
1984	Onuaguluchi G, Tanz RD	Electromechanical dissociation and possible uncoupling of phosphorylation following tachydysrhythmogenic dose of amrinone in the guinea-pig Langendorff heart preparation. ¹⁶
1985	Onuaguluchi G, Igbo IN.	Comparative antiarrhythmic and local anaesthetic effects of piperazine citrate and lignocaine hydrochloride. ¹⁷
1986	Onuaguluchi G, Igwe SA.	Effects of pentazocine on the guinea-pig ileum. ¹⁸
1987	Onuaguluchi G, Igbo IN.	Comparative local anaesthetic and antiarrhythmic actions of levamisole hydrochloride and lignocaine hydrochloride. ¹⁹
1987	Onuaguluchi G, Mezue WC.	Some effects of piperazine citrate on skeletal muscle and central nervous system. ²⁰
1989	Onuaguluchi G	Some aspects of the pharmacology and physiology of the <i>Ascaris suum</i> muscle. ²¹
1989	Onuaguluchi G	Preliminary study of an extract from <i>Diodia scandens</i> on some toxic effects of <i>Echis carinatus</i> venom. ²²
1990	Onuaguluchi G, Igbo IN.	Electrocardiographic changes induced by levamisole hydrochloride in the rat. ²³
1990	Onuaguluchi G, Igbo IN.	Electrocardiographic changes induced by levamisole hydrochloride in the guinea-pig. ²⁴
1993	Onuaguluchi G, Igbo IN.	Effect of levamisole hydrochloride on the guinea-pig atrium. ²⁵
1996	Onuaguluchi G, Ghasi S.	The pharmacological basis for the use of dried sheep placenta in traditional obstetric practice in Nigeria. ²⁶
1999	Onuaguluchi G, Nwafor P.	Pharmacological basis for the use of the antivenene water soluble extract of <i>Diodia scandens</i> as a laxative, oxytocic agent and a possible aphrodisiac in traditional medicine practice in eastern Nigeria. ²⁷
2000	Onuaguluchi G, Ogbu IS.	The nature of the sheep chorionic oxytocic substance. ²⁸
2006	Onuaguluchi G, Ghasi S.	Electrocardiographic profile of oral piperazine citrate in healthy volunteers. ²⁹
2006	Ghasi S, Onuaguluchi G.	Time course of effect of piperazine citrate on the electrocardiogram of the rat. ³⁰

Parkinsonism'. In chapter five, he reported deformities in post-Encephalitic Parkinsonism. In chapter six, he described the assessment of drug therapy in Parkinsonism. The final chapter of the thesis, chapter seven, was on the sites and modes of action of orphenadrine and other drugs used in the relief of muscle rigidity and weakness in Parkinsonism. The experience gained during his doctoral studies at the Glasgow University set him on a firm footing for a career in Basic and Clinical Pharmacology. Some of his scholarly writings, accessible through the National Library of Medicine (PUBMED) of the USA, are shown in Table 2.

Social life and recognition: Professor Onuaguluchi got married in 1956 to Esther Gundu and the union was blessed with daughters and one son (Maureen, Stella, Jean, Gladys, and Victor). He won many honors during his career and professional life. He was member of the Royal College of Surgeons (MRCS), Licentiate, Royal College of Physicians (LRCP), London 1956; he became a member of the Royal College of Physicians (MRCP), Glasgow in 1972. He was honorary treasurer for the Association of Physicians of West Africa from 1962 to 1966, and honorary president of the West African Society for Pharmacology in 1971. Onuaguluchi loved gardening and reading as hobbies that he engaged in even when he was busy. Professor Gilbert Onuaguluchi died on the April 30, 2005 at Enugu. He was buried on November 11, 2005 at his hometown Achi, Enugu State. His memory lives on in all his mentees and at all the institutions where he served and made indelible positive impact.



Professor Gilbert Onuaguluchi Lecture Hall at the Medical School of the University of Nigeria, Nsukka

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