The Vice-Chancellor, Deputy Vice-Chancellor (Administration), Deputy Vice-Chancellor (Academic), The Registrar and other Principal Officers, Provost of the College of Medicine, Dean of the Faculty of Clinical Sciences, Dean of the Postgraduate School, Deans of other Faculties and of the Students, Distinguished Ladies and Gentlemen.

Preamble

It is with great delight and honour that I stand humbly before you all to present today's inaugural lecture on behalf of the Faculty of Clinical Sciences. Mine is the second inaugural lecture from the 47-year old Physiotherapy programme of this University, coming after the first one presented on 25 March, 2010 by my teacher, Professor Arinola O. Sanya entitled, "*Physiotherapy and Wellness: Rungs of the Ladder"*.

When I received a memo dated 28 December, 2012 from the Faculty of Clinical Sciences informing me of my nomination by the Executive Committee of the Faculty to present this lecture, I immediately took up the challenge. I saw no need to wait till the expiration of the 21-day window to indicate my acceptance and submit a topic, hence my written response got to the Dean within 3 days of receiving the memo. I thank my Dean, Professor A.I. Ajaiyeoba and the Faculty for enabling me, through this kind gesture, to become the 5th Physiotherapist to deliver an inaugural lecture in the entire West African Sub-region. Earlier ones were delivered by Professor Emeritus V.C.B. Nwuga (OAU, Ile-Ife); Professors I.O. Owoeye (University of Lagos); Arinola O. Sanya (University of Ibadan); and M.O.B. Olaogun (OAU, Ile Ife).

Mr. Vice-Chancellor Sir, I would like to crave your indulgence to start by acknowledging my parents—El-Hadji Hamzat AbdulSalam Alaga and Hadjia Ajoke Hamzat for equipping me with sound moral, spiritual and academic education that formed the foundation for me to attain professorial status in the Nigerian premier University. I am proud of, and very grateful to them for giving me a University education in addition to all their trainings, and more

importantly for sending me to the first and best University in the most populous black nation in the world—the University of Ibadan. I am truly happy to be their "Neurophysiotherapist son". They certainly knew about medicine, nursing, pharmacy and others, but hardly anything about physiotherapy. Yet, they approved of me studying physiotherapy—a divinely chosen profession, as my mother assured me then. Today, 23 years after I matriculated as an undergraduate student of physiotherapy in this University, it is debatable if physiotherapy is better understood now than then.

My take on this is that the physiotherapy profession still faces the challenges of being misunderstood, misconstrued, under-recognized, and undervalued particularly in Nigeria. This stems from a lack of understanding of its meaning, scope and placement within the healthcare setting, sometimes even by fellow healthcare service providers.

Physiotherapy

A straight forward description of Physiotherapy or Physical Therapy is that it is a branch of medical science that deals with the treatment of injuries and/or disorders by using physical methods (American Physical Therapy Association 2013). Some accounts showed that the practice of some forms of physiotherapy started about the time of the physicians, Hippocrates and Hector—sometime around 460 BC—who used massage and hydrotherapy to reduce stress, relieve pain and stimulate healing in their patients. Available records suggest that Swedish gymnasts started what later became physiotherapy profession in 1813. The first structured physiotherapy in Great Britain was due to activities of some nurses who were engaged in the art of massage in 1894. Physiotherapy came to Nigeria in 1946 with the Royal (now National) Orthopaedic Hospital, Igbobi as the port of entry. Since those early days, my profession has grown from a mere blend of different massage procedures in 1894, through a practice of combined massage and Swedish remedial exercise, via the art of using physical modalities to treat

disease conditions, to an independent clinical practice that stands on scientific foundation. It has evolved from the status of an essentially "***eminence-based***" practice to that of a profession that thrives on ''***evidence-based''*** procedures and protocols. It has become a dynamic profession with established theoretical and scientific base, as well as widespread clinical applications in the restoration, maintenance, and promotion of optimal physical function.

Flourishing research activities have contributed to its development, and it has become a profession with distinct autonomy, identity and with a knowledge base (Hamzat and Amusat 2002). Physiotherapy represents both an art of healthcare and a profession. Grammatically, it is both a noun and a verb. Composite-wise, it is both an art and a science. The skills component represents the art, while the rationale behind each of these skills captures the scientific component.

Physiotherapy or Physical Therapy is concerned with identifying and maximizing the quality of life and movement potential within the spheres of promotion, prevention, treatment/intervention, habilitation and rehabilitation. This encompasses physical, psychological, emotional and social well-being of the people. The scope of Physical Therapy practice is not limited to direct patient/client care, but also includes: advocating for patients/clients health, teaching, research, public health strategies, developing and implementing health policy locally, nationally and internationally (World Confederation for Physical Therapy 2012).

One of the probable factors still limiting understanding and appreciation of physiotherapy in Nigeria is the non-availability of standard definition in the indigenous languages. According to oral history, its old description as *"Komo n rin"* in Yoruba was occasioned by its central role in helping to restore walking function among children who had lower limbs paralytic poliomyelitis. I like to describe a Physiotherapist in Yoruba language as, "*Awon akosemose isegun ode oni to mo nipa bi a ti n dena tabi toju awon aisan ati ilera ara ni awon ona miran to yato fun ki a gun abere, mu oogun tabi ki a se ise abe".*

Sub-specialties of physiotherapy include Paediatrics, Geriatrics, Cardio-Respiratory, Musculoskeletal, Sports, Industrial, Women's Health, Community and Neurological Physiotherapy. Physiotherapy is my profession. My specialty is Neurophysiotherapy. A career choice that was based on natural affinity and the interest-stimulations I was constantly getting by observing that Nigerian physiotherapist of unequal standing—the legendary late Pa J.O. Obiri, while rehabilitating neurologically-ill patients.

Mr. Vice-Chancellor Sir, for over 19 years, I have practised physiotherapy on many wards and in many wards. To give an account of this traverse, I present to you my inaugural lecture entitled, **"From Ward to Ward: The Neurophysiotherapist as a Returning Officer".**

To clear the air, this lecture is not about the politics of Nigeria. I am neither a politician (although I have a few in the family) nor am I a political scientist (even though I admire many of them). I am only a truly happy Nigerian, an indigene of Ward 3 in Ibadan North Local Government Area, who resides in Ward 5 of the neigbouring Akinyele Local Government Area. You can deduce how far I have "travelled" from home to take up lecturing appointment in this faraway place—University of Ibadan located in Ward 12 of Ibadan North Local Government Area.

Neurophysiotherapy

Physiotherapy is a vital component of the health team, but neurophysiotherapy is the nucleus of the medical rehabilitation team. The team typically includes neuromedicine/ neurosurgery, occupational therapy, ergotherapy, speech and language therapy, psychotherapy, visual rehabilitation, audiological rehabilitation, sexual therapy, relaxation and music therapy practitioners (Owolabi and Hamzat 2011).

Neurological disorders are an important cause of disability affecting all age groups, and exert a significant impact on the socio-economy and psychology of those afflicted. Whenever a neurological problem arises, rehabilitation provides the solution; the Neurophysiotherapist takes the centre stage.

As a Neurophysiotherapist, the variety of patients and clinical conditions I manage covers the "entire human life". It ranges from (i) a pregnant woman who may be present with obturator nerve palsy and pregnancy-related lower motor facial nerve palsy, to (ii) the newborn who has brachial plexus palsy, cerebral palsy, spina bifida, acute flaccid paralysis to, (iii) the middle-aged man presenting with stroke, Gullian Barre syndrome and spinal cord injury, all the way to (iv) the geriatric patient who has Parkinson disease or dementia. This implies that the Neurophysiotherapist can play a role at any locus in the spectrum of human life. Anyone may need the services of this expert, especially with advancing age.

Rehabilitation of the person with neurological deficit is the process of ensuring that she/he lives a meaningful, qualitative and prolonged life while restoring function as much as possible (Owolabi and Hamzat 2011). It involves multidisciplinary and multidimensional therapies which entail processes of assessment, treatment planning, goal setting, therapeutic intervention and evaluation of outcome. A Neurophysiotherapist is essentially a "Movement Expert" who manages movement (motor) dysfunctions which could manifest as too much (e.g. choreo-athetoses), too little (e.g. paresis) or no movement at all (paralysis) in the neuro-muscular cubicle of human biomechanics. The primary focus of neurophysiotherapy is on optimizing motor performance, through task-oriented exercise and trainings. It is therefore all about improving motor function, which is the main precondition to enhance physical functioning, restore independence and prevent development of secondary health conditions.

Indications for Neurophysiotherapy

Vice-Chancellor Sir, the specific clinical presentations I treat in neurologically-ill patients include paralysis/paresis, pain, abnormal muscle tone, contractures, loss of sitting and standing balance, incoordination, abnormal gait pattern, associated disorders like decubitus ulcer which results from

prolonged immobilization. By far, the most important role I play as a Neurophysiotherapist is in the restoration of motor ability and thereby functional recovery.

The general principles underlying my interventions are: (i) identifying and establishing the presence of a motor impairment, (ii) analysing the motor disorders with a view to breaking it into motor task components, and (iii) provision of appropriate physical intervention aimed at correcting the identified motor dysfunctions. The intervention is executed through teaching by instruction, demonstration and training the patient on how to perform the components of the motor task in synchrony. This is followed by repeated performance (practice) by the patient to ensure proficiency in the task. The patient is then re-evaluated to ascertain how much he has learnt and how well he is able to perform the motor task, with or without assistance or support. Neurophysiotherapy intervention is therefore analogous to teaching/learning a new topic or subject in a classroom setting. Please note that, like any teaching-learning situation, some constructs would influence the success of the intervention (motor performance) among the learners (patients). Those constructs can be classified as the Patient, Environmental and Manpower factors.

The Patient Factor

These include the type and severity of the disease, age, sex, quality of intervention, affordability and accessibility to the physiotherapy care. Others are patient's self-motivation and psychological make-up; spiritual and social support most especially spousal support, as well as impact of caring on the health and quality of life of the patient and the family caregivers. The impact of neurological illness is usually felt by both the victim and their family members; therefore I manage the patient holistically by including the informal caregivers in my physiotherapy intervention plan.

Generally, physiotherapy intervention in neurology is such that apart from treatment administered in the clinic, the

Neurophysiotherapist prescribes home programmes for the patients. These are exercise procedures and functional tasks that the patients are expected to practice at their respective homes, under the supervision, or with the assistance of their informal caregivers (spouse, parents, children, friends and relations). This is a justification for involving the informal caregivers of the patients in their assessment, goal setting and overall management. It is also relevant to the total care plan, that the impacts of the disease on the patients' life, including their quality of life and that of their caregivers are well understood. This postulation spurred me to collaborate with others to carry out research works in that direction. I present to you some of our findings with regards to stroke and cerebral palsy, which is the most common neuropaediatric condition seen in a physiotherapy clinic (Peters, Adetola, Fatudimu 2010).

Cerebral palsy (CP) is primarily a motor disorder, and physiotherapy plays a leading role in its habilitation. For these children, accurate assessment is essential in order to design appropriate physiotherapy intervention. Unless there is an agreement between the patients, the caregivers and the healthcare providers on what functional disorders the patient has, goal setting and attainment would become a mere illusion.

Our observation at the physiotherapy clinic is that there is often a disparity between what the caregivers typically report as what their children with CP can do at home, and the motor function assessed by physiotherapists in the clinic. We therefore sought to investigate the level of concordance between the physiotherapists (care providers) and the family members (informal caregivers) in the assessment of motor function in children with CP (Hamzat and Fatudimu 2008). The two groups turned in similar verdicts and we concluded therefore that either one of the care providers or the caregivers may objectively assess motor function in cerebral palsy.

In a 2007 study, we investigated the impact of caring on the general health status of caregivers of children with cerebral palsy in Ibadan, Nigeria (Hamzat and Mordi 2007). Our findings showed that caregivers of children with CP had lower general health status when compared with their peers caring for typically-developing (apparently healthy) children living in the same community (table 1). This negative impact of caring on the health of the caregivers, could in turn adversely affect compliance with physiotherapy schedule and home programmes. We therefore, recommended that health practitioners should pay attention to how providing care may affect the health of the caregivers of these children. Providing adequate information about the disease process as well as teaching the caregivers coping strategies, could help.

Table 1: Comparison of General Health Status of Caregivers of Children with, and without Cerebral Palsy

Variable	CP Caregivers Mean ± SD (n=71)	Non-CP Caregivers Mean ± SD (n=70)	U-value	p-value
General Health	14.58 ± 6.18	9.53 ± 5.27	1237.50	0.00

Source: Hamzat & Mordi (2007). Int Journal of Rehab Research 30(3): 191-194.

In a more recent study (table 2), we reported that Quality of Life (QoL) was also lower among people caring for children with CP compared to their counterparts caring for typically-developing children (Fatudimu, Hamzat and Akinyinka 2013). We observed in this 2013 publication, that as the motor performance of the children with CP improved, the QoL of their caregivers also improved. However, this improved quality of life was not significant enough, to put them at par with their counterparts caring for the typically-developing children.

Table 2: Comparison of the Quality of Life of Caregivers of Children with Cerebral Palsy with the Control Group (n= 205)

Time(Months)	WHOQoL-Bref CGCP (n= 107) Median(Range)	CG (n=98) Median (Range)	μ	p
Baseline	84.0(48.0 – 115.0)	96.0(62.0-123.0)	-2.23	< 0.001
2	87.0(14.0- 118.0)	96.0(68.0- 129.0)	-0.48	<0.001
5	90.0(28.0-110.0)	95.0(58.0-119.0)	-2.20	<0.001
8	89.0(60.0–118.0)	96.0(63.0 – 124.0)	-2.75	<0.001

Source: Fatudimu, Hamzat & Akinyinka (2013). International J Therapy and Rehab 20(3): 131-135

Key: WHO QoL-Bref- World Health Quality of Life Questionnaire; CGCP- Caregivers of Children with Cerebral Palsy; CG – Control Group.

Caring for stroke victims also impacts the quality of life of their caregivers. We observed that whether it is a spouse or other categories of family members that provide the care for a stroke survivor, their QoL is impacted (table 3). However, the physical and social relationship domains QoL was more affected among the family members, than other categories of caregivers (Vincent-Onabajo, Ali and Hamzat 2012). Matters relating to the general health and QoL of the caregivers, could affect compliance with physiotherapy clinics appointments and execution of physiotherapist-prescribed home programmes. Non-compliance could in turn, negatively affect the overall chance of recovery by the patient.

Table 3: Kruskal-Wallis Test for Difference in Caregivers' Quality of Life by Selected Variables

Variable	Physical	Psychological	Social Relationship	Environment
Gender				
Male	14.7 (3.2)	14.8 (2.1)	15.5 (3.2)	15.5(2.0)
Female	14.8 (3.0)	14.9 (2.2)	15.7 (3.1)	15.7(2.6)
KW	0.001	0.50	0.01	0.62
p-value	0.97	0.47	0.92	0.43
Age group (years)				
14-30	15.5 (3.1)	15.1(2.1)	16.2 (3.2)	16.0 (2.4)
31-55	12.9 (2.3)	14.3(2.3)	14.1 (2.7)	14.6 (1.4)
KW	8.94	0.64	5.92	6.16
p-value	0.00*	0.42	0.02*	0.01*
Educational background				
Primary	13.2 (3.0)	14.1 (1.6)	14.0 (3.4)	14.7 (2.3)
Secondary	16.0 (3.2)	14.2 (1.8)	16.3 (3.0)	15.1 (1.8)
Postsecondary**	14.9 (2.9)	15.2 (1.8)	15.8 (3.1)	15.9 (2.4)
None	10.5 (0.7)	15.5 (0.7)	13.5 (2.1)	16.0
KW	7.94	5.36	4.63	4.93
p-value	0.05*	0.15	0.20	0.18
Employment				
Employed	14.5 (2.9)	14.6 (2.3)	15.5 (3.2)	15.3 (2.6)
Unemployed	11.7 (2.1)	14.3 (2.8)	13.9 (2.9)	13.9 (1.3)
Schooling	15.8 (3.1)	15.3 (1.8)	16.0 (3.1)	16.4(1.8)
KW	9.82	1.60	2.81	8.87
p-value	0.01*	0.45	0.24	0.01*
Relationship				
Family	14.6 (3.2)	14.9 (2.2)	15.4 (3.2)	15.6 (2.3)
Acquaintance	16.8 (1.3)	14.0 (2.4)	17.8 (2.2)	14.8 (1.7)
KW	1.90	0.87	1.92	0.84
p-value	0.16	0.34	0.16	0.36
Post stroke duration (months)				
1-12	15.1 (3.0)	15.1 (2.0)	15.9 (3.3)	15.9 (2.2)
13-24	13.4 (3.4)	14.0 (2.7)	14.2 (2.5)	14.4 (1.1)
>24	14.4 (2.3)	14.6 (2.3)	15.2 (2.9)	15.4 (3.6)
KW	2.52	1.11	2.86	5.92
p-value	0.28	0.57	0.24	0.05*

Source: Vincent- Onabajo, Ali and Hamzat (2012) Scand J Caring Sci
** Ongoing/completed postsecondary education; *significant at p= 0.05; KW= Kruskal- Wallis Chi- Square

Apart from the health of the caregivers, another factor that could influence compliance with physiotherapy schedule, among the neurophysiotherapy-seeking patients is the affordability of physiotherapy care. In Nigeria, where many

people do not have health insurance coverage, but rely on the "pay-as-you-receive-treatment" plan, cost-affordability is a big challenge. For instance, in a 2011 study with associates, I investigated affordability of care by stroke victims, receiving neurophysiotherapy at public hospitals in Ibadan (Hamzat, Fatudimu, Okedare and Olaleye 2011). Findings showed that the patients spent 86.4% of their mean monthly income on post-stroke physiotherapy care. Expending more than three-quarters of monthly income on physiotherapy services only, without health insurance coverage, calls for concern. The implication is that the other aspects of life may suffer in the process of receiving post-stroke physiotherapy care. A possible extrapolation from this is that poverty would eventually prevent the patient from receiving adequate physiotherapy care.

Environmental Factor

The World Health Organization and World Bank jointly produced *World Report on Disability* revealed that more than one billion people, or 15% of world population, live with disabilities of different types around the world (WHO 2013a). These scary figures include those with seeing, hearing, learning or mobility/movement disability which is an important consequence of motor dysfunction associated with neurological illness. Mobility disability may be more accentuated when the environment in which the victim lives is discriminatory, inconsiderate and not conducive. Such a hostile environment, may limit their ability to live meaningfully and independently in the community.

The use of assistive devices like wheelchair and walking stick is common among people who suffer spinal cord injury or SCI. A very important cause of SCI in Nigeria and elsewhere is road traffic accidents.

A 2013 World Health Organization (W.H.O.) *Global Standard Report on Road Safety* revealed that 1.24 million people are killed in road traffic accidents annually, 59% are between the ages of 15 and 44 years and 77% are male (fig. 1); pedestrians and cyclists constitute 27% of all road deaths, with the figure higher than 75% in some countries (WHO 2013b).

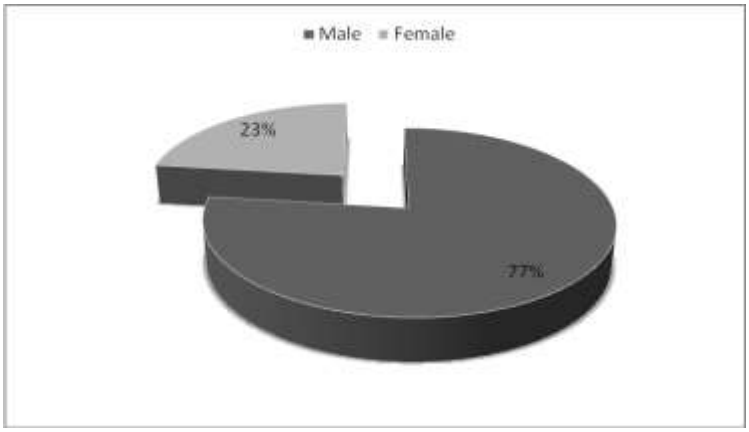


Fig. 1: Road traffic accidents by gender.

This report also showed that the risk of dying as a result of a road traffic injury is highest in the WHO African Region at 24.1 per 100, 000 population and lowest in the WHO European Region at 10.3 per 100, 000 population (WHO 2013b). Generally, between 20 to 50 million people are also reported to sustain non-fatal injuries including spinal cord injury. There are however other causes of spinal cord injury such as infection, tumour, spinal overload and domestic accident/violence.

Spinal cord injury is a sudden, life-transforming condition with consequential devastation that may necessitate the use of a wheelchair for mobility. Overall functioning is affected and the patient may become "disabled" and "handicapped". Those words in parenthesis suggest that the victim is helpless and probably "useless". However, this is not a true reflection of the situation as many of them are able to function within their limits. To encapsulate what happens with a patient that has functional limitation, especially resulting from physical challenges, the World Health Organization introduced the concept of ICF—The International Classification of Functioning, Disability and Health (WHO 2001). A major significance of the ICF is that it acknowledges, that every human being can suffer a decline in health and thereby experience some degree of disability.

According to Leonardi et al. (2006), disability is the umbrella term for impairments, activity limitations and participation restrictions. It refers to the negative aspects, of the interaction between an individual (with a health condition) and that individual's contextual factors namely: environmental and personal factors. Disability is not something that only happens to a minority of humanity. As you are most probably aware, most people with advanced age experience one form of disability or the other. To paraphrase Dr. Margaret Chan, the Director General of the W.H.O., "almost every one of us will be permanently or temporarily disabled at some point in life". Think of old age and remember walking stick and wheelchair. Better still, remember that person close to you who wears a pair of prescription eye glasses. It is to overcome the shortcomings with his God-given eyes, in other words, to overcome seeing disability.

The ICF 'mainstreams' the experience of disability and recognizes it as a universal human experience. The ICF is a classification of health and health-related domains into body, individual and societal perspectives by means of specific lists: (i) a list of body functions and structure, and (2) a list of domains of activity and participation. A list of environmental factors is also included in the ICF, considering that an individual's functioning and disability occurs in a context (W.H.O. 2001).

Mr. Vice-Chancellor Sir, one question that comes to mind is this: To what extent does our environment ameliorate the burden of mobility disability? Ignorance, lack of empathy, absence of appropriate legislation and lack of political will to enforce the available ones, socio-cultural beliefs, and environmental design are among the factors that make life even more difficult for people with mobility disability in our society. Listen to this to appreciate the seriousness of the matter. A first of its kind study of accessibility of public buildings in Ibadan to wheelchair users was carried out by Hamzat and Dada in 2005. We noted that fewer than 20% of the public buildings (including educational, health and recreational centres) were accessible to self-propelling wheel-

chair users (table 4). We argued that this unfortunate situation could limit opportunities for community integration among people who use wheelchairs for ambulation.

Table 4: Frequency Distribution of Buildings, Entrances and Routes by Function Ownership

	Hosp.		**Edu.**		**Soc. /Rec.**		**Govt. paras/agencies**	
	n	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Buildings (N=38)								
Acc (n=7)	2	66.7	1	6.7	0	0.0	4	28.6
Inacc (n=31)	1	33.3	14	93.3	6	100.0	10	71.4
Entrances (N=173)								
Acc (n=78)	3	60.0	28	30.4	24	68.6	23	56.1
Inacc. (n=95)	2	40.0	64	69.6	11	31.4	18	43.9
Routes (N= 129)								
Acc (n=25)	2	40.0	13	22.0	4	18.2	6	14.0
Inacc.(n= 104)	3	60.0	46	78.0	18	81.8	37	86.0
Total	**20**				**55**		**54**	

Source: Hamzat and Dada (2005), Asia Pacific Disability Rehabilitation Journal 16(2): 125-134

Key: Acc = accessible; Inacc = Inaccessible; Edu = education; Hosp=hospital; Soc=social; Rec=recreational

Furthermore, the challenges constantly faced by a current M.B.A. student of this University due to lack of ramps to lecture rooms and some other centres come to mind. It seems the irony of it may be lost on the Medical Sociologists and others in the Faculty of the Social Sciences. At any rate, our Medical Library and the Administrative building of the College of Medicine is not wheelchair-accessible either. To bring it closer home, it appears that an individual who ambulates with the aid of a wheelchair may not be able to present his/her inaugural lecture in this non-wheelchair accessible Trenchard Hall. The only "*consolation"* to this foregoing "*indictment"* is that the new Physiotherapy building will be adjudged non-wheelchair accessible. Though an individual using a wheelchair for mobility can access the ground floor, there is no ramp leading from the ground to the first floor of the building. Such is the environment to which the neuropatient is expected to return and actively participate. I appeal that we obey the clarion call by the Director General of the W.H.O. that, "all of us must do more to break the barriers which segregate people with disabilities, in many cases forcing them to the margins of society".

Manpower Challenge

A major challenge which the sub-specialty of neuro-physiotherapy faces in Nigeria, is lack of adequate manpower. This is due in part to preference for "less stressful" specialties and limited opportunities for training in the field. In our survey of the opinions and beliefs of newly graduated physiotherapists in Nigeria, about specialization and their specialty preferences, neurophysiotherapy ranked 4th out of the seven preferred sub-specialities investigated (Hamzat, Farotimi and Olarewaju 2010).

May I humbly remind you that I was the first to obtain a PhD in Physiotherapy from any West African University, and my specialty is Neurophysiotherapy. Until August 2001 when I was employed as a Lecturer in the University of Ibadan, there was no staff in my field in any Nigerian university. I remained the sole expert in the university system for about 8 years until when Adebimpe Obembe at OAU Ile-Ife, followed

by Babatunde Foluso Ajayi at University of Ibadan obtained PhD degrees in neurophysiotherapy in succession. Between 2001 and now, the total number of Nigeria-based physiotherapists with PhD degree in this field has increased by 8 (male = 37.5%; female = 62.5%) (fig. 2).

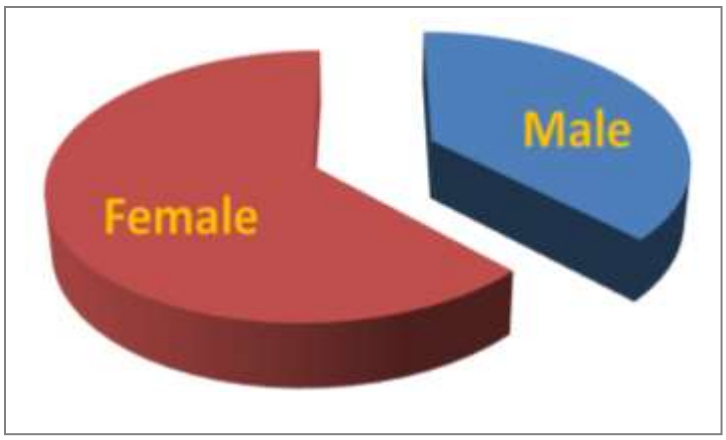


Fig. 2: Gender-Bias in Neurophysiotherapy?

I am proud to say that I personally supervised half of these PhD degree research works. They are those of Drs. Margaret Bukola FATUDIMU, Olubukola Adebisi OLALEYE, Faderera Ajibola ADEPOJU and Grace Oluwatitofunmi VINCENT-ONABAJO. I hasten to add here that I am not insinuating that it is only physiotherapists with PhD degrees that can effectively treat a neurologically-ill patient. There are presently about 60 physiotherapists with postgraduate certificates, diploma and Master's degree in Neurophysiotherapy practising in Nigeria. This figure translates roughly to 1 Neurophysiotherapist to 2.5 million Nigerians. This implies 1 Neurophysiotherapist per 159 wards in the 774 local government areas constituted by 9, 572 political wards and lowest unit of health services delivery in Nigeria (WHO 2013c).

Mr. Vice-Chancellor Sir, physiotherapy intervention in neurological diseases is usually stratified, based on outcome of the critical evaluation of the clinical presentations. Let me

illustrate the package of a typical physiotherapy intervention in neurological disorders, with my role in management of CerebroVascular Accident (CVA), otherwise called stroke. This is a disease condition which I have as an individual and collaboratively researched.

Cerebrovascular Accident or Stroke

Stroke, so-named because of the way it strikes people down, is described as a "Brain Attack" based on its recognition as a medical emergency, that demands urgent attention, comparable to that of a heart attack. According to Sacco et al. (2013), stroke is classically characterized as a neurological deficit, attributed to an acute focal injury of the central nervous system by a vascular cause, including cerebral infarction, intracerebral hemorrhage and subarachnoid hemorrhage. It is one of the most devastating neurological diseases, often causing death or gross physical impairment or disability (Mukherjee and Patil 2011). Risk factors for stroke, which does not necessarily imply causality include: age, gender, hypertension, ischaemic heart disease, abnormal blood lipid profile, high-salt diet, transient ischaemic attack, diabetes mellitus, smoking, excessive alcohol intake, obesity, oestrogen-containing oral contraceptives, infection and sickle-cell disorders. In Africa, hypertension is an important risk factor; as more than 90% of patients with haemorrhagic stroke and more than half with ischaemic stroke are found to have pre-stroke hypertension (Mensah 2008).

According to the World Stroke Organization (WSO), 15 million people suffer a stroke every year, nearly 6 million die because of it, and by 2015 the number of deaths will be up to 6.5 million people each year (WSO 2013). In Nigeria, Danesi et al (2007) reported a crude prevalence rate of 1.14 per 1,000 population (114/100,000) in a community-based study in Lagos, Nigeria and concluded that stroke prevalence rates in urban Nigeria are lower than those in most developed countries.

The term "Stroke" is used synonymously with Cerebro-Vascular Disease (CVD) and CerebroVascular Accident (CVA). While some specialists tend to prefer the CVD, as a

Neurophysiotherapist my preference is CVA. Not for "identity" purposes, rather because CVA encapsulates indication for physiotherapy referral better. It is only the aftermath of the "accident", namely haemorrhagic or ischaemic event, that I manage. It is worth emphasizing that whenever a stroke is suspected, prompt medical attention should be sought. However in Nigeria, many factors could cause delay in reporting at the hospital and commencement of treatment, including referral to physiotherapy. These are poverty, poor knowledge of the disease, lack of access to hospital and rehabilitation facilities as well as environmental or physical factors such as transportation and insecurity (Hamzat, Arulogun, and Akindele 2010). Finding a solution to the challenges of poor access to physiotherapy services, after a stroke in Nigeria is of interest to me and others. Ideas that come to mind include, bringing physiotherapy to the respective homes of those who can afford domiciliary physiotherapy and offering the service at the primary healthcare centre. This is with a view to integrating post-stroke physiotherapy into the primary healthcare policy in Nigeria. These conjectures however need scientific substantiation before they can be advocated. To explore this, we carried out a randomized controlled trial comparing the outcomes of physiotherapy intervention, on selected indices of recovery for stroke survivors, treated at a primary health centre, with those treated in their respective places of domicile (Olaleye, Hamzat and Owolabi 2013). Our findings revealed that both groups of stroke survivors, recorded significant improvement in their clinical status (table 5). We therefore concluded that rehabilitating at any of these locations, which are outside the traditional hospital setting, may enhance access to post-stroke physiotherapy in a low income country like Nigeria.

Table 5: Comparison of Motor Function Scores of Participants in the Primary Health Care and Domiciliary Groups from Baseline to Week 10

Time Frame	PHCG (n=25) $\bar{x}$ ±S.D	DG (n=27) $\bar{x}$ ±S.D	f-value	p-value
Baseline	22.9±15.2	19.9±16.4		
Week 2	26.3±13.9	24.4±14.5		
Week 4	29.5±13.2	28.4±13.0		
Week 6	30.8±12.8	31.6±11.7	280.31	0.94
Week 8	32.4±12.7	34.2±11.2		
Week 10	34.7±11.7	36.6±10.3		
χ^2	112.31*	117.92*		
p-value	0.01	0.01		

Source: Olaleye, Hamzat and Owolabi (2013). Disability and Rehabilitation 1-6

Key: * Significant at p = 0.05
PHCG-Primary Health Care Group; DG-Domiciliary Group

Some of our Findings on Stroke

The most significant physical manifestation of stroke requiring physiotherapy is the motor paralysis, with hemi-plegia as the most common presentation. This is the paralysis of one mirror half of the body, with or without affectation of the lower two-third facial muscles.

Loss of balance after a stroke, which can present as standing asymmetry, is a clinical feature that impacts negatively on walking, gait and performance of activities of daily living. We observed that among post-stroke individuals, the lesser the standing asymmetry, the better their motor performance and gait pattern (Hamzat, Olaleye, Adeniyi and Awolola 2006). In a more recent study with a colleague in Ghana, I showed that post-stroke individuals who walked with a cane had poorer balance and less societal participation than their age-matched counterparts who walked unaided (Hamzat and Kobiri 2008). This is contrary to the view that using a walking stick would enhance balance and promote function. Based on our research findings, we recommended

that post-stroke physiotherapy plan should include exercise training programme to enhance weight bearing on the paretic limb. Another research, also with colleagues in Ghana, showed that standing symmetry is negatively influenced by advanced age and positively by the duration of physiotherapy received after stroke (Agyapong-Badu, Hamzat and Wiredu 2007); thus, signifying the importance of physiotherapy in restoration of balance.

Balance retraining may however involve use of expensive equipment and modalities that are not readily available in this environment. There is therefore a need to find alternatives, yet effective tools that would serve the purpose in a low income country. Hamzat and Fashoyin (2007) provided instructive evidence, based on one such equipment (a stepper) to retrain balance which is a prerequisite for walking (table 6). Indices of both dynamic and static balance such as; tandem standing, standing on one leg, turning trunk with feet fixed, turning 360 degrees and reaching forward in standing, showed significant improvement after the training on the stepper.

Table 6: Comparison of Pre-And Post Training Berg Balance Scale (Bbs) Scores for Post-Stroke Patients

Activity	Pre treatment (X±S.D)	Post treatment (X±S.D)	z-scores	p-values
Sitting unsupported	4.00±0.00	4.00±0.00	0.00	1.00
Sitting to standing	4.00±0.00	4.00±0.00	0.00	1.00
Standing to sitting	4.00±0.00	4.00±0.00	0.00	1.00
Transfers	3.88±0.35	4.00±0.00	- 1.00	0.31
Standing unsupported	4.00±0.00	4.00±0.00	0.00	1.00
Standing with eyes closed	3.63±0.52	3.88±0.35	- 1.00	0.31
Standing with feet together	3.88±0.35	4.00±0.00	- 1.00	0.31
Tandem standing	2.63±0.74	4.00±0.00	- 2.42	0.01*
Standing on one leg	1.88±0.83	3.50±0.53	- 2.59	0.00*
Turning trunk (feet fixed)	3.00±0.93	3.88±0.35	- 2.07	0.03*
Retrieving objects from floor	3.88±0.35	4.00±0.00	- 1.00	0.31
Turning 360 degrees	3.00±0.93	3.75±0.46	- 2.12	0.03*
Stool stepping	3.25±0.89	3.88±0.35	- 1.89	0.05*
Reaching forward in standing	2.38±0.74	4.00±0.00	- 2.56	0.01*

* significant at $p \leq 0.05$

Source: Hamzat & Fashoyin (2007) *Afr J Neurol Sci*. 26(2): 39-47

Walking, which is critical to functional activities of daily living, facilitates the discharge home from hospital among neuropatients. My experience in clinical practice is that post-stroke individuals often demand for an idea of the time they would be able to resume independent walking. This is always a tricky question because recovery of walking activities depends on many clinical and non-clinical factors. I collaborated with a colleague to investigate how selected clinical and psycho-social factors may determine when post-stroke independent walking ability is restored. We discovered that age and initial level of severity, rather than their personality traits, had significant influence on resuming independent walking (Hamzat and Okesola 2006). We also observed a female gender advantage on commencement of independent walking, although this was not statistically significant.

In another study (table 7), we noted that post-stroke individuals walk slowly at a speed of between 0.25m/s and 0.42m/s, which is about 22% to 36% of the speed of their apparently healthy, sex and age-matched peers who walk at a speed of 1.14m/s (Hamzat and Alabi 2006). Besides the lower speed, significantly higher energy is expended during walking, and this can contribute to functional disability especially amongst the deconditioned, older patients. The energy cost of ambulation can however be reduced, through an exercise training programme. Through research, I found that a 10-week, full weight-bearing ambulatory exercise training on a treadmill resulted in a significant 28% reduction in energy cost of walking. Their gait pattern also improved during this period of training (Hamzat 2002a).

Table 7: Comparison of Mean Walking Speed of the Subjects

Variable	DSH (n=14)	NDSH (n=17)	Control (n=20)	P	DSH Vs NDSH	DSH Vs Control	NDSH Vs Control
Speed (m/s)	0.42±0.38	0.25±0.13	1.14±0.25	0.00	NS	Sig	Sig

Source: Hamzat and Alabi (2006) Hong Kong Physiotherapy Journal 24:2-7

Key: DSH = Dominant Side Hemiparesis; NDSH = Non-Dominant Side Hemiparesis; vs = versus; Sig = Significant Difference; NS = Non significant difference.

Another factor that could limit upper limb function and gait pattern after a stroke is pain. Our 2010 investigation of incidence of Musculoskeletal Pain (MSP) and its impact on motor performance among community-dwelling stroke survivors, showed that 79.4% had pain symptoms, out of which 23.5% have the pain pre-dating stroke onset (Hamzat and Osundiya 2010). We also observed that musculoskeletal pain was as common as central post-stroke pain, and that presence of MSP was associated with lower motor performance. This is an indication that pain assessment and treatment should be given adequate attention in stroke rehabilitation.

Post-stroke impairment exerts significant impact on other aspects of the patients' living namely, activity, participation, community reintegration and quality of life. In the first of its kind study in Nigeria, I collaborated with Dr. Grace Vincent-Onabajo to explore a 6-month inter-relationships between motor function, activity, participation and Quality of Life (QoL) among stroke survivors in Ibadan (Hamzat and Peters 2008; Hamzat and Peters 2009; Peters and Hamzat 2009). Our findings from this pioneer longitudinal study revealed that motor function, activity and participation of stroke survivors improved progressively over a 6-month period (fig. 3). We also observed that significant recovery of motor function, did not translate to improved overall Quality of Life (QoL), although it correlated with the health domain QoL. Implication of this is that factors other than physical functioning, may be determinants of quality of life in this group. In a separate 12-month longitudinal study, we also found that functional activity improved linearly and significantly up to ten months after stroke onset and then a plateau.

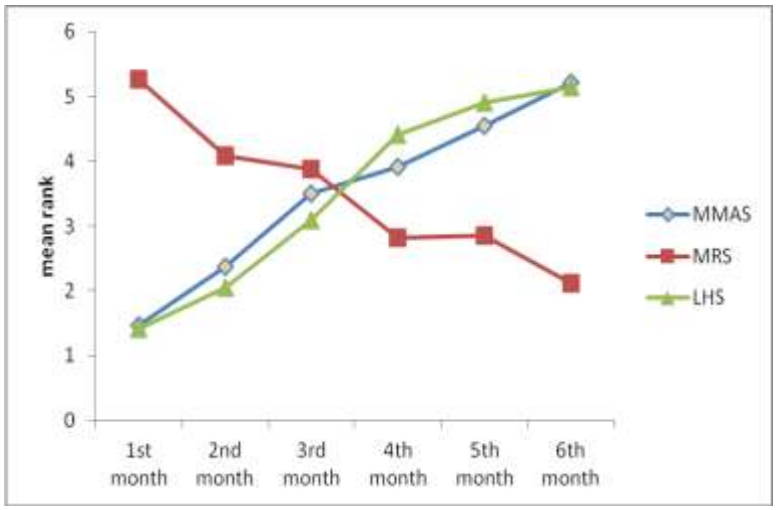


Fig. 3: Trend of patient's motor function, activity and participation over six months.

Physiotherapy in Stroke Care

A patient who has suffered a stroke may present in the physiotherapy clinic with hemiplegia/hemiparesis, cognitive dysfunction, urinary incontinence, abnormal gait pattern, abnormal muscle tone (commonly presenting as increased tone), loss of balance and movement, loss of function, physical dependence, disability, low community participation and reduced quality of life. For stroke, the neuro-physiotherapist therefore manages a patient with convoluted medical, physical, psycho-social and spiritual complaints, particularly in our culture. My interventions can be discussed under: Acute, Motor Restoration, and the Reintegration phases.

The Acute Phase

This is the period immediately following a stroke. The patient is typically on the regular hospital ward, or a stroke unit and physiotherapy commences as soon as possible, usually within 24 hours of referral. It is the most critical stage, which can set the tone for the level of motor recovery, which a patient may

achieve over time. Physiotherapy intervention is focused on managing features associated with altered level of consciousness, abnormal respiratory functions such as reduced chest excursion, paralysis, pain, abnormal muscle tone, hemiagnosis or neglect of the affected side. Here, the Neurophysiotherapist would ensure:

(a) Prevention of contractures and abnormal synergies, using pillows to appropriately position the limbs in bed,
(b) Patency of the respiratory airway and adequate ventilation through respiratory physiotherapy, to prevent accumulation of mucus in the chest (which is a fertile "ground" for infection – a poor prognostic factor) and lung collapse especially if the patient is unconscious,
(c) Promotion of adequate circulation, to prevent venous stasis and possible Deep Vein Thrombosis (DVT) using mobilization exercises and functional activity in bed,
(d) Prevent development of and manage pressure sores using regular turning activity (with the nursing team) and Actinotherapy respectively,
(e) Minimize hemiagnosia through the process of conducting all activities (including nursing care) and interacting with the patient from the paralytic side, and
(f) Pain management using physical modalities such as hydrocollator pack and massage therapy.

As it is practised in a comprehensive specialist stroke unit care in Trondheim, Norway, early systematic mobilization, including out-of-bed activity can also commence within 17 hours of stroke onset. This has been the principle of stroke management at that centre for about 20 years and impressive results have been reported (Carr, Shepherd and Bernhadt 2010). Physiotherapy approach to stroke rehabilitation at the University College Hospital, Ibadan and in many parts of Nigeria is to commence neurophysiotherapy for stroke as

early as possible in order to facilitate good and quick recovery, as well as promote early home discharge, and we are certainly getting good results. Making physiotherapy care intensive at this phase is also recommended, as it could reduce mortality and enhance better and quicker recovery. This would lessen the time spent on the hospital ward, minimize the economic cost and overall burden on the family caregivers, reduce pressure on the limited manpower and facilities in the hospitals and most importantly, reduce stroke-associated disability.

Motor Restoration Phase

At this juncture, the patient is still on the hospital ward and the full picture of motor dysfunctions is clear. The patient is then commenced on physiotherapist-assisted or guided motor (movement) retraining activities. The focus of neurophysio-therapy includes, (i) management of spasticity, (ii) retraining functional activities, (iii) static and dynamic balance restoration, (iv) walking re-education, (v) kinesitherapy, (vi) pain management, and (vii) prevention of late complications.

The principles, procedures and protocols I use include the ones based on the respective and or a combination of Bobath Technique (Bobath 1990), Motor Relearning Technique of Carr and Shepherd (Anderson and Lough 1986), and Proprioceptive Neuromuscular Facilitation made popular by Kabat and Voss (Voss et al. 1985). This is also the point at which, the patient is considered for discharge home. It is pertinent to note that the common practice around here is to discharge the patient home (or the patient does a self-discharge) as soon as he is considered to be "medically stable"—often with minimal functional recovery recorded. It appears that functional ability is not a strong factor in determining when the patient is discharged from the in-patient facility. This practice needs revising, especially considering that there is no stop-over facility between the hospital ward and the respective homes of the patients in Nigeria.

Reintegration (Post-discharge) Phase

At this stage, the patient still receives and benefits from neuro-physiotherapy because recovery from stroke can continue over several years, although recovery tends to depend on the nature, severity of initial deficit and non-stroke factors. This underscores the importance of continuing neurophysiotherapy care on out-patient basis. While the Acute Phase is the most critical, the Reintegration Phase is the most delicate and complicated in several ways. Suffice it to say, that it is the phase when the "jury is in". My clinical experience is that while many stroke victims would indicate during the **Motor Restoration** phase that they have come to terms with this life-changing incident, the "story" changes when they leave the hospital. For many of them, the problem becomes 'real' and so fully appreciated only after they have been discharged from in-patient facilities and return to the wards where they live.

Physiotherapy plan at this phase is to intensify on functional re-training, outdoor ambulation re-training and restoration of hand functions. Also, both instrument and non-instrument Activities of Daily Living (ADL) functions within the household, including community activities are re-introduced, all within the scope of the patient's capability. The Neurophysiotherapist also manages the stroke-related disability and thereby reduces its impact on the overall well-being of the stroke victim in the community. While motor performance is still central to achieving these aims, the Neurophysiotherapist pays attention to improving on the non-motor constructs, like cardio-respiratory endurance, which could influence the efficiency of the motor systems of the patient.

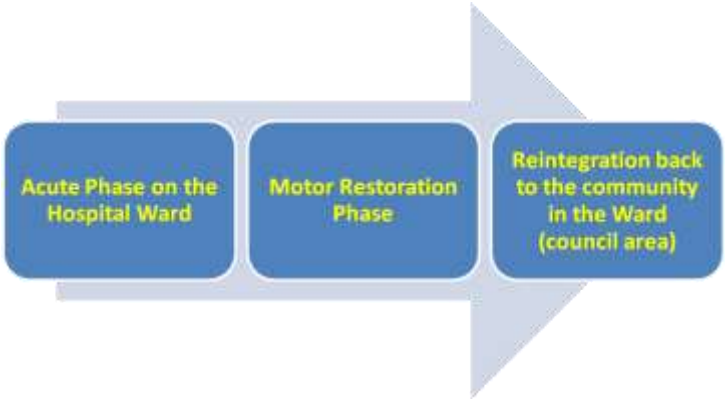
For instance, reduced level of physical activity commonly observed after a stroke leads to reduced aerobic capacity and physical deconditioning, and this would impact negatively on the general health of the stroke survivors. I had observed earlier (Hamzat 2001) that community-dwelling stroke

survivors had lower cardio-respiratory functions than their age-matched counterparts. The outcome of my doctoral research work, using graded treadmill walking exercise training, showed that aerobic capacity of individuals with chronic stroke can be improved upon through a carefully-prescribed, gradually-progressed and closely-monitored exercise conditioning programme. Part of physiotherapy intervention at the **Reintegration Phase** should therefore, include endurance or physical fitness training, so that the stroke victim may be able to endure the stress and strain of day-to-day living. The ultimate goal is to enhance community re-integration of the patient and achieve improvement in the overall health-related quality of life (Hamzat 2002b).

Mr. Vice-Chancellor Sir, from the foregoing, it is obvious that commencing from the acute phase, when the patient is on the hospital ward, through the phase of motor restoration and the reintegration back to the community in his ward or local council, the Neurophysiotherapist is at hand, and hard at work, returning several times over many months, to ensure that a favourable result is produced. I wish to submit that the central role I play as a Neurophysiotherapist, in facilitating the return of the stroke victim from the hospital ward, to reintegrate back to the ward where they are domiciled is incontrovertible. You may wish to note that apart from being alive, the single most important concern for most stroke victims, is being able to independently and functionally use the paralysed limbs, that is, to overcome problems of motor impairment.

Through what means can this be achieved? **Neurophysiotherapy!** For playing such a critical role in helping the patient achieve his ultimate goal of **returning** home in his **ward** from the journey of helplessness while in the acute phase on the hospital **ward**, it is simply apt to describe the Neurophysiotherapist as a "**Returning Officer''** who **delivers results**. Appropriate caption for the foregoing discourse therefore is: ***From Ward to Ward, The Neuro-***

physiotherapist as a Returning Officer (i.e. returning to treat the patient over many weeks so as to return him/her from the Hospital Ward to his/her Home Ward in the local government area, with the desired results of recovery and reintegration).



Concluding Remarks

Mr. Vice-Chancellor Sir, I have painted a rather simplified picture of how a patient with a specific neurological disorder (stroke), is taken through a route from the hospital ward to the ward of his local council, with the Neurophysiotherapist at the centre of activities. As a Returning Officer, I hereby declare that for the neurologically-ill patient, **Neuro-physiotherapy Works!** I wish to put on record, that the degree of success recorded in restoration of independent function by the neurologically-ill patient, is always through sweats and strain on the part of the Neurophysiotherapist as well. My intervention is such that I am not only applying my knowledge and skills, I expend a lot of physical energy lifting regions, segments and even the entire body of the patient, and physically demonstrating the required movements and functional skill I am retraining in my patient. I do this for basically every patient with central nervous system lesion and as recovery of motor function is often a long term-challenge, the neuropatient typically spends months and sometimes

years, receiving neurophysiotherapy. It is not a one-time or few weeks "*under close monitoring*" treatment affair.

Neurological physiotherapy is a marathon kind of care, rather than a sprint or medium distance care. This is more so as the victim tends to live with the aftermath that includes residual paralysis, pain, distorted gait function or immobility. The consequence of which can create a sense of inadequacy as a member of the community where they ordinarily were fully involved. The work is therefore ongoing for the Neurophysiotherapist, even after the patient has been returned to the community.

Remember that I am the first to admit that I work as a member of a team (Health team and Neuro-rehabilitation team, in particular). I am however able to say without fear of contradiction, that I am the only health practitioner whose line of intervention perfectly fits into the common Yoruba saying that, "*asakoko pelu koko e lo jo n gbe*" (the cocoa farmer is exposed to as much heat from the sun as the cocoa seeds that he is sun-drying). There is a need to understand the scope and peculiarities of my professional practice and most especially my sub-specialty. It is unfortunate that those who are supposed to know do not even bother to find out at all. The notion that the same cap fits all certainly does not apply to physiotherapy.

Matters Arising

Mr. Vice Chancellor, Sir, the 7-item communiqué derivable from this lecture is:

1. Neurophysiotherapy is essential for anyone who has neurological deficits. This expertise helps to restore motor function, which is considered the most obvious and significant physical challenge that accompanies neurological disorders, and upon which ability to function independently and meaningfully in the community is based.
2. The role of the Neurophysiotherapist is undoubtedly not limited to the four walls of the hospital or clinic. It extends beyond the traditional hospital setting to after

discharge, when the patient needs training in functional activities necessary to navigate within the community.

3. Physiotherapy is Physical Therapy. It is a form of therapy that involves not just the use of skills, knowledge and physical modalities, but also physical exertion by both the patient and the physiotherapist. It is not a one-time consultative health practice; it is usually long term (lasting at least several weeks).
4. Health care policy makers and administrators in Nigeria should endeavour to understand the meaning, scope and peculiarities of physiotherapy. It is only when this is done that physiotherapy would be accorded the proper recognition and utilized to its maximum level in delivering quality health care to Nigerians. The kind of appreciation which specialists in neurosciences have (that it takes a team effort to make patients get better) should be imbibed by the entire health sector.
5. Nigerian governments at every level, as well as institutions, should promulgate laws/edicts/regulations and enforce compliance with the enacted laws as per accessibility of public buildings and utilities to people with disability, most especially of mobility type. We should all remember that injustice to one is injustice to all. We should all think of our old age when arthritis or even neurological disorders may prevent independent walking, when walking stick becomes the third leg and wheelchair becomes a customized "chair-car".
6. Efforts should be intensified by all concerned, to increase the number of neurophysiotherapy experts in the country.
7. Neurophysiotherapy should be considered for inclusion in the primary healthcare policy in Nigeria. Support system should also be put in place for caregivers of Nigerians with neurological disorders.

Acknowledgements
In the course of my educational and professional journeys, many people have served as my guides and guardians, and to them I am very grateful. A certain Anon wrote: "*we want a learning professor, not a learned professor, one who does not read is not better than one who cannot".* Because I am a learning professor, I am bound to make the mistake of omitting some vital names from this list. Please pardon my failings in omitting your worthy-of-listing names. It is not missing with God who will reward you abundantly and those I remember to mention specifically here.

I want to begin by appreciating you all, a wonderful audience; starting with the first African Physiotherapist, the 87-year "young" Pa, Dr. T. Abayomi Oshin who has led all physiotherapists from far and near to this occasion. I acknowledge the foundation-laying efforts of all my teachers at the pre-university level (Alfa Agba Alaga Madrasa at Oke-Aremo; St Paul Anglican Primary School, Yemetu; Oke 'Badan High School Oluyoro Ibadan; Oyo State College of Arts and Science, Ile-Ife); all my teachers in this University most especially those who mentored me in the field of physiotherapy, namely, late Pa J.O. Obiri, Professor Arinola O. Sanya—my wonderful teacher, supervisor, mentor and sitting Deputy Vice-Chancellor (Administration) of this 65-year old University; Professor Seyi 'Ladele Amosun, now of the University of Cape Town South Africa (who taught me for only one academic session in this University but remains a supportive and inspiring mentor), Dr. Aderonke O. Akinpelu—my teacher and current Ag. Head of Physiotherapy; Dr. K.A. Sanni an all-round teacher and motivator; Dr. Olufunmilayo Alawale (my B.Sc project supervisor) and Revd. Adeoluwa O. Jaiyesimi. I salute all present lecturers in my Department including Dr. A.F. Adeniyi and Dr. Olubukola A. Olaleye who were among the first set of M.Sc students that I supervised in this University.

As a clinical student, and later, rookie physiotherapist, I learnt from notable physiotherapists including the kind, godly and supportive Mr. Razak K. Olanrewaju, the hard-working Mr. K.A. Moranti, Mr. Wumi Olalekan, Sir NUB Adeghe,

Mr. T.J. Oyewumi, Mr. Lekan Olatunji and the gentleman physiotherapist par excellence—Mr. Olatokunbo Odunowo. I recognize other wonderful physiotherapy seniors, contemporaries and colleagues from UCH, Oyo State and other parts of Nigeria, especially members of my Ibadan 1994 class of physiotherapy.

To my other teachers in this University especially my lecturers and instructors at the Department of Human Kinetics and Health Education represented by Professors Veronica C. Igbanugo, Elizabeth I. Nwankwo and Dr. J.F. Babalola; I am sure you know you are blessed. I want to appreciate most specially my wonderful teacher and doctorate degree co-supervisor—an urbane and highly cerebral gentleman neurologist, Professor Adesola Ogunniyi, about whom I have always wondered how it is possible to be so brilliant and yet modest. Thank you Sir.

I wish to specifically acknowledge those who have served as my career counsellors, advisers and guardians over the years, including Professor U. Julius Ikhatua and his very kind wife—Dr. Matilda Ikhatua. I appreciate my thoughtful fatherly friend and leader, Professor I.F. Adewole (the current Vice-Chancellor of UI), Professors O.O. Oduye (former DVC, UI); O.O. Akinyinka (current Provost College of Medicine), A.I. Olayinka (DVC Academics, UI), Emmanuel Maximin-Agha, V.O. Adegboye, Olaitan A. Soyannwo (whom I served under as a Sub-Dean shortly after my employment) are very well appreciated. I also thank Professor and Dr. (Mrs.) Samuel Olofin, Professor O.G.B. Nwaorgu, Drs. F.A. Fehintola and Gani Adeniran, as well as Dr. (Mrs.) Victoria Asemota. Also unprecedented is the positive contributions of my truly loyal friends—Debo and Toyin Ajayi, Jibola and Nike Hamzat, Segun and Toyin Olowookere, Olabisi Onikepo Bamgbade, Nurudeen ‘Tunde Amusat, Babatunde Foluso Ajayi, Olubusola E. Johnson, Oyedunni Arulogun; Prisca Bisi Adejumo, Paul Onakoya, Bola Orimadegun, Mayowa Owolabi, and Professor ‘Yinka Aderinto. Mrs. M. Oderinde an outstanding retired Deputy Director, Pharmacy at the UCH for her prophecy of year 2000 that came to pass.

The non-teaching staff of the Department of Physiotherapy (past and present), including Messrs S.B. Oyegunle, A. Adeleke, S.O. Oyekunle, Wole Egbeyale, Mrs. Lawrence, Mrs. Banke Adenekan and Mrs. Comfort Olorode, as well as all the people I have crossed path with and who have enriched my life, you are well appreciated.

I acknowledge the contribution of all those who at various times chose to constitute themselves as, or erect obstacles on my way. Yes, without you I probably wouldn't have been steadfast in works and prayers. Thank you for always making the word of God manifest (Quran 8 *vs.* 30).

To all my former and present students, especially the more than 50 of them that I supervised their research works, now scattered all over the world, and all those with whom I have had the opportunity to collaborate in research endeavours, I say a very big thank you. Surely it has been fruitful working with you.

I specially appreciate my siblings, their spouses and children for their prayers, physical, financial and psycho-social support since the ages. My dearest big sister and mini-mother, Bodunrin Iyabode Asabi Lawale; Fatai Olaniyi Amoo, Moromoke Ayinke Muibat, Kabir Iyanda Abiodun, Aminat Ajike Abimbola, Rafiat Arike Omolara and Saheed Ayinde Abiola. I love you all. My 'other' mother (Chief Mrs. Leticia E. Laniyonu) and 'other' siblings including Mrs. Kike Edward are greatly appreciated for their love and kindness, most especially my beloved sister and friend, Ibijoke Stella Mayers.

I also thank God for people like my *babas* Alhadji Wahab Olayiwola Surulagba and Sheikh Rafiu Omi Ayetoro. The love, support and regular wise counselling of Uncle Y.K. and aunty Sheri Oladokun is greatly appreciated. I acknowledge Busola (Taylor) Adeniji and Bunmi OBM Adeniji, as well as kind and inspirational people like Messrs 'Laide Subair, Monsur Ola Adebayo, Drs. Sikiru A. Adebayo, Francis Fatoye, Professors A.O. Olorunnisola, 'Lanre Olutayo and also all the good people I have worked with on one committee or the other, my science group mates at the Postgraduate School represented by Drs. Olanike Adeyemo,

J.O. Babalola, F.O. Ogundare, S.B. Olaleye, K.O. Falade, M.A. Odeniyi, I.O. Azeez, O.J. Babayemi et al. I recognize members of the Red Cross Society, UCH students' detachment and Oyo State Medical Students Association.

Thanks to my extended family here present led by Magaji AbdulFatai Alaga and Ustaz Maruf Duduyemi Abdusalam Alaga. I also appreciate the Akandes led by their patriarch, Chief Yekeen 'Bisi Akande. To my Imams—Alhaji Sirajudeen Oloso, Ustaz Hassan Lawal, Alhadji Mahmoun Tijani Eleshinmeta, Alfa Yahqub Quadri, and others, I say Shukran!

Adoration…

Some things in life do not have universal measures. One of such is God's blessings. However, I submit that a good wife is a gold standard, especially when you add the Yoruba saying that *obinrin rere lo ma n bi omo rere* (It's a good wife that bears good children). I thank God for blessing me with a true friend, lifetime co-traveller, dedicated companion, confidante, supporter, comforter and *numero uno fan*, my very beautiful and extremely intelligent wife, Bisi Hilda Hamzat. She is my Manager who never assumes the role of a Director. Thanks my Love for choosing to manage me as I am, and for managing me very effectively. I love you and I use this opportunity to again affirm that I am grateful for your never-ending support and care. I also appreciate you for giving us wonderful children—my adorable, motivating, and charismatic Aisha Ayoajoke (*iya mi Asake*); soul mate, inspirational and great fan Omar Ayotomiwa (*baba mi Akanbi kan*) and my charming and caring Naelah Ayosola (*omo mi Abike*). I am immensely grateful for the stability and peace of mind that I get from you my wife and our children. I really cannot thank God enough for blessing me with a wonderful wife and fantastic children as companions.

There was a time...

There was a time when God "posted" to this world some of His precious creatures, whom He decided to ''recall'' one by one at moments when all the people whose paths crossed

theirs felt stranded. The good news however is that the lights they left still shines. To three of them, I dedicate my inaugural lecture. They are:

(i) **El-Hadji Hamzat Akanji AbdulSalam Alaga—**a scholar of uncommon pedigree, a true friend of God (*waliy*), my protective and supportive father, and a fantastic, caring and generous family man.

(ii) **Hadjia Haola Ajoke Hamzat**—my strongest fan, loyal friend, caring and protective peace-loving mother, a rallying point in the family, who never doubted my ability to make a success of anything I laid my hands upon. Her faith in me surely shaped me and my life. I pray God will continue to bless my parents with *Aljana Firdaus*. Amin.

(iii) **Architect Oluwemimo Stevens Laniyonu**—a rare genius, a gentleman to the core, an index of what hard work, honesty and kindness look like. He gave Bisi (my wife) out to me in marriage. May his soul continue to rest in perfect peace. Amen.

On a Final Note…

Mr. Vice-Chancellor Sir, distinguished audience. That has been the inaugural lecture of a learning professor who got fed up with school after only a few days at the primary school and said, "enough is enough" "*se ojojumo leniyan yoo ma lo si school ni? Ti mo ban lo lojoojumo, tani yoo ma wa ba baba je oka nile*? (Is it every day one would be going to school? Who would then be sharing plate of *amala* with *baba*)? I pray God returns you in peace from this hall to the comfort of your respective homes in your wards and local government areas, and not the hospital ward.

I thank you all.

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BIODATA OF
PROFESSOR TAL-HATU KOLAPO HAMZAT

Tal-hatu Kolapo, Hamzat was born on 15 June, 1970 to the family of El-Hadji Hamzat Akanji Abdulsalam Alaga and Hadjia Ajoke Hamzat of the Alfa Agba Alaga compound, Oke-Aremo Ibadan. He had his early education at St. Paul's Anglican Primary School, Yemetu (1975-1980) and Oke 'Badan High School, Oluyoro Ibadan (1981-1986), before proceeding to the now defunct Oyo State College of Arts and Science, Ile-Ife for his Higher School Certificate (1988-1989). He was admitted to the University of Ibadan in 1990 and obtained his B.Sc. (Honours) degree in Physiotherapy in March, 1994.

After his 12 months post-university internship at the University of Benin Teaching Hospital (1994-1995), and one year mandatory NYSC at the General Hospital, Ikeja (1995-1996), he returned to the University of Ibadan and obtained M.Ed degree in Physiology of Exercise (Department of Human Kinetics and Health Education) in May 1998. He thereafter registered as one of the pioneer postgraduate students at the Department of Physiotherapy, College of Medicine in July, 1998 where he obtained his PhD in Neurological Physiotherapy on February 5, 2001.

He worked at a variety of settings including general, private and teaching hospitals before his appointment as a Honourary Clinical Consultant in Physiotherapy by the Board of the University College Hospital, Ibadan in August, 2005. He was also a Physiotherapy clinical specialist at the Korle Bu Teaching Hospital, Accra Ghana. His first employment at the University of Ibadan was in August, 2001 as a Lecturer I in the Department of Physiotherapy, College of Medicine; and was promoted to a Senior Lecturer in October, 2004. In 2009, eight years after his first appointment in this University, Tal-hatu Kolapo Hamzat was promoted to the rank of Professor of Physiotherapy at the age of 39, thus becoming the youngest Professor of Physiotherapy in Africa! He is the 5th Physiotherapist to deliver inaugural lecture in the entire West Africa sub-region.

Professor T.K. Hamzat is an effective communicator, teacher and researcher, who has successfully supervised 25 M.Sc, 4 Ph.D (and 4 ongoing PhD), and 21 Bachelor's degrees research works. A well-known researcher in physiotherapy and rehabilitation. He has to his credit 90 publications including chapters in books, edited books, published abstracts and 65 full length original articles in peer review journals. This former visiting Physiotherapy Lecturer to the University of Ghana, Accra and the University of Maiduguri has made more than 50 public presentations locally and internationally. He has served as external examiner to the physiotherapy undergraduate and post-graduate programmes of Obafemi Awolowo University and University of Lagos, and Internal/ External Examiner to some Departments in the University of Ibadan. He has reviewed or been a reviewer for many local and international journals and the UI/UCH Research Ethics Committee.

Professor Hamzat is a hard-working, well-focused, trustworthy, self-assured, yet very humble and amiable gentleman, scientist and budding administrator. He has displayed a lot of diligence and high commitment to assigned duties at both academic and administrative levels. He is indeed an invaluable officer to the Department of Physiotherapy, Faculty of Clinical Sciences and the College of Medicine, and the University of Ibadan as a whole. He has served and is serving his University and the community in many capacities:

(i) Barely 12 months as a Lecturer, he was appointed a Sub-Dean Undergraduate (Nursing and Physiotherapy) from August 2002 to July 2004;
(ii) Served as Clinical Coordinator, Undergraduate and Postgraduate studies in Physiotherapy;
(iii) Member, Executive Committee, Faculty of Clinical Sciences (2002-2004);
(iv) Member, College of Medicine Fund Raising Committee (2002-2006);
(v) Chairman, College of Medicine Ceremonials Committee (2004-2006);

(vi) Editor, Faculty of Clinical Sciences Newsletter (2008-2010);
(vii) Faculty Representative on College of Medicine ICT Committee;
(viii) Elected Representative of Congregation on the Senate of the University of Ibadan (2009-2012);
(ix) Sub-Dean Postgraduate, Faculty of Clinical Sciences (2010 to 2012);
(x) Member, Curriculum and Executive Committee Postgraduate School (2010-2012);
(xi) Member, Senate Committee on drafting Evaluation Tool for Teaching by Lecturers of the University;
(xii) Member, Transition Committee and Action Committee on Academic Matters for the new Vice-Chancellor (October to November 2010); and
(xiii) Member, 65th Anniversary Committee of the University, among other positions of responsibilities and services in the University.

This man of quality who was also a member Quality Assurance Policy Drafting Committee, University of Ibadan has received several recognitions including the Most Admired Male Lecturer, College of Medicine (2005), Patron of the year for 2 successive years (2011 and 2012) by the Red Cross Society UCH Detachment, and recognized for his commitment and dedication towards the School of Allied Health Sciences, University of Ghana in its developmental stage particularly to the physiotherapy programme.

A man of many parts, he has served and is currently serving in the following capacities: Financial Secretary, Ibadan College of Medicine Alumni Association (2007-2011); Chairman, Parents Teachers Association, Fontanna International School (2011 to Date); Chairman Muslim Community, Ifelodun – Lafaya, Moniya; Patron Red Cross Society, UCH students detachment; Patron, Oyo State Medical Students Association; Co-Chairman, Bital Consultancy Nigeria, and Director, La Naishom Nigeria Limited.

Professor T.K. Hamzat has scored many firsts:

- He is among the first set of Nigerian physiotherapists to be inducted into the profession in March 1994; and the set that commenced post-university physiotherapy internship in Nigeria;
- First to obtain PhD in physiotherapy from any university in West Africa;
- First to be appointed a Lecturer with a PhD degree in physiotherapy at the University of Ibadan; and
- First professor of Neurological Physiotherapy in West Africa.

He belongs to several local and international professional bodies in the field of Neurophysiotherapy, Neurosciences and others relevant to his profession, some of which are The Nigeria Society of Physiotherapy, Academic Staff Union of Universities (ASUU), World Stroke Organization, and the International Association for the Study of Pain, to name a few. This pride of his generation is currently the Managing Editor, African Journal of Physiotherapy and Rehabilitation Sciences, and Editor-in-Chief, Journal of Nigeria Society of Physiotherapy.

Professor Tal-hatu Kolapo HAMZAT, a man of faith and dedicated family man is married to Bisi Hilda Hamzat (nee Laniyonu); his wonderful friend of 26 years and the marriage is blessed by God with Aisha Ayoajoke, Omar Ayotomiwa and Naelah Ayosola.