



The Path To Our Destiny:

The Transitioning of Physiotherapy
from a Semi-Profession to
a True Profession



A Key Note Speech Delivered by Distinguished University Professor Joseph Balogun* at the Third Christopher Agboola Ajao's Lecture on the Occasion of the 55th Annual Conference of the Nigeria Society of Physiotherapy (NSP) held at Lokoja, Kogi State, Nigeria on October 29, 2015



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Memorializing the Legacy of Physiotherapist, Visionary Leader, Chief Christopher A. Ajao

Abstract

The themes of the 55th annual conference of the Nigeria Society of Physiotherapy are “Advancing Physiotherapy in Nigeria: The Next Step”, “Physiotherapy in Preventive Healthcare: Challenges and the Way Forward.” I have been asked to tailor my key note speech to address both themes of the conference. The Biblical metaphor of the Promise Land was utilized as the centerpiece of this presentation. I submit that our journey to the Promise Land will be reached when physiotherapy in Nigeria becomes a “doctoring” profession, and physiotherapists are widely respected and legislatively authorized to provide direct access in the prevention and treatment of individuals with functional impairments, and also recognized as experts for promoting the physical health and well-being of asymptomatic individuals. This presentation proffered a path that will lead the profession of physiotherapy in Nigeria to a true professional status.



Professor Joseph A. Balogun

Protocol List

- Ambassador Isyaka Usman Akanson, Chairman Opening Ceremony
- Mr. Luis Awute, the Permanent Secretary, Federal Ministry of Health
- Captain (rtd.) Idris Wada, the Executive Governor of Kogi, State represented by
Dr. Idris Omede, Honorable Commissioner for Health, Kogi State and Penultimate President of the Nigerian Medical Association
- Dr D. G. Eleshin, Medical Director, Federal Medical Centre, Lokoja
- Dr. B. F. Ehalaiye, the acting Chief Medical Director, Kogi State Specialist Hospital, Lokoja
- Dr. Patience Osinubi, Head and Director of Hospital Services, Federal Ministry of Health, Abuja
- Alhaji S. O. Aliyu, the Permanent Secretary, Kogi State Ministry of Health, Lokoja
- NSP Past Presidents and Elders, Fellows of the NSP, Members of NSP National Executive Council
- Mrs. Jumoke Smith, Chair of Conferences National Organizing Committee
- Mrs. Naomi Eniolorunda, the Chair of Local Organizing Committee
- Revd. Adeoluwa Jaiyesimi, the Registrar Post graduate Physiotherapy College of Nigeria
- Mrs. Olufunke Akanle, the Registrar of the Medical Rehabilitation Therapists' Registration Board of Nigeria (MRTB)
- Ladies and Gentlemen and Gentlemen of the Fourth Estate, the Press.

Preamble

Mr. Chairman, I need to plea for immunity in case I stated incorrectly the sequence of the protocol for this pomp, pageantry, and circumstance ceremony. First, it is indeed appropriate to recognize the historical significance of the city that we are all gathered this morning. Lokoja, the capital of Kogi State, is the first settlement for the British colonial masters when they arrived in West Africa. The name “Nigeria” was coined by the British journalist, Flora Shaw while she was gazing at the spectacular beauty of the Niger River on the day she got married to Lord Fredrick Lugard, the Governor-General of Nigeria at the time.

Second, I personally thank Dr. Idris Omede and his retinue for finding time out of their very busy work schedule to come to this auspicious occasion, even in the middle of an ongoing political campaign in the state. The presence of several state officers and dignitaries at this opening ceremony of the 55th annual conference of the Nigeria Society of Physiotherapy (NSP) signifies the high regard and affection that the administration of Governor Idris Wada has for the profession of physiotherapy. Kogi often called the “confluence” state because of its unique and strategic location embodied the heartbeat, and albeit the conscience of our nation. Kogi state with twenty-one local government areas has the distinction of being the only state in Nigeria which shares a boundary with ten other states.

I thank the national and local Conference Organizing Committees for their kind words and encomiums in the citation that was read in my honor a few minutes ago. It is always gratifying to be appreciated by people who know one best. To God be the glory that the Biblical dogma that a “*prophet is honored everywhere except in his own country*” (Mathew 13:57), does not apply in this case. I am honored and enthused to be here today as the third guest to deliver a keynote address in recognition of our late visionary

leader, Chief Christopher A. Ajao. The two previous keynote speakers, Professor Victor Obajuluwa and Dr. Muoyo Okome, are my colleagues at the University of Ibadan and we are all presently living in the United States of America (USA).

Personal Disclosures and Disclaimers

To set the stage for my presentation, Mr. Chairman, a few personal disclosure and disclaimer is in order. I was registered with the NSP in 1978 but departed the country in 1980 in search of greener pastures. After my doctoral education at the University of Pittsburgh, I made a five-year cameo appearance in Nigeria between 1986 and 1991. Given that I have not lived in Nigeria for over two decades, I will not claim to know the minutia of the state of affairs within the physiotherapy family or the political jostling within the NSP. I am not currently a card-carrying member of the NSP, but I am a licensed physical therapist in the State of Illinois in the USA.

Most importantly, I am an NSP member at heart and consider myself a member of the physiotherapy family. Therefore, I will liberally use the pronoun “our” during this presentation. I consider everyone in the audience a colleague and I believe our fate is intrinsically linked.

The preponderance of my examples during this lecture will be from the USA. I have no apologies for that. USA is a nation that I know very well and have adopted as my country. I have lived in Chicago, Illinois for the last 15 of my 30 years abode in America, and now consider the “windy-city” home. I describe my ethnicity as Nigerian-American.

Homecoming

I am overwhelmed with so many indelible and heart-warming memories and converging emotions as I stand in front of you this morning. This

occasion is homecoming for me. I am a man of humble beginning born at Idofin in East Yagba local government area of this state. My father was a multipurpose peasant farmer, not the Jimmy Carter mechanized type of a farmer; but the type that uses cutlass and hoe to plow the ground to sow seasonal crops. My mother was also a farmer and a revered “Gari” producer.

Both of my parents were illiterate; however, they were visionary to send me to school at the age of 5. They surrounded me with great love and hoped that someday, I can become somebody that will shine the bright light on the family tree. With a meager income from their farm products, they pinched pennies to pay for my secondary and high school education. They could not afford to send me to college, but I was lucky to receive the federal government scholarship for my undergraduate and graduate education.

It would have been nice to have my parents here today to share in this grandeur of an occasion. Unfortunately, I lost both of them at the early phase of my professional career. I lost my mother in 1975, when I turned 20 years, during my first year at the University of Ibadan. My father died several years later in 2000 when my career began an upward trajectory; I was only three months into a new position as dean of the College of Health Sciences at Chicago State University. My father did not witness my career blossom.

In recognition of their hard work and hope for what I could become, I dedicate this lecture to my parents, Mr. Ezra Odu and Mrs. Rhoda Abiba, Balogun. As the “son of the soil”, from Kogi State, it is with a meek heart, humility, sense of purpose and pride that I stand before you today to engage in this conversation on the future of our profession, physiotherapy.

Before delving into the topic for this lecture, I would like to comment on an issue that is of utmost concern to me as an indigene of Kogi State.

Kogi State Physiotherapist Shortage Debacle

Honorable Commissioner Omede, I was reliably informed that health care is one of the top priorities of Governor Idris Wada's administration. It is therefore a privilege to bring to his attention an area of health care that has hitherto been ignored since the inception of Kogi State about three decades ago. There are over 2,000 physiotherapists currently practicing in the country, but only eight of the 2,000 are gainfully employed in Kogi State. Of the eight physiotherapists, only two is employed by the state government, five employed by the federal government and one is in private practice.

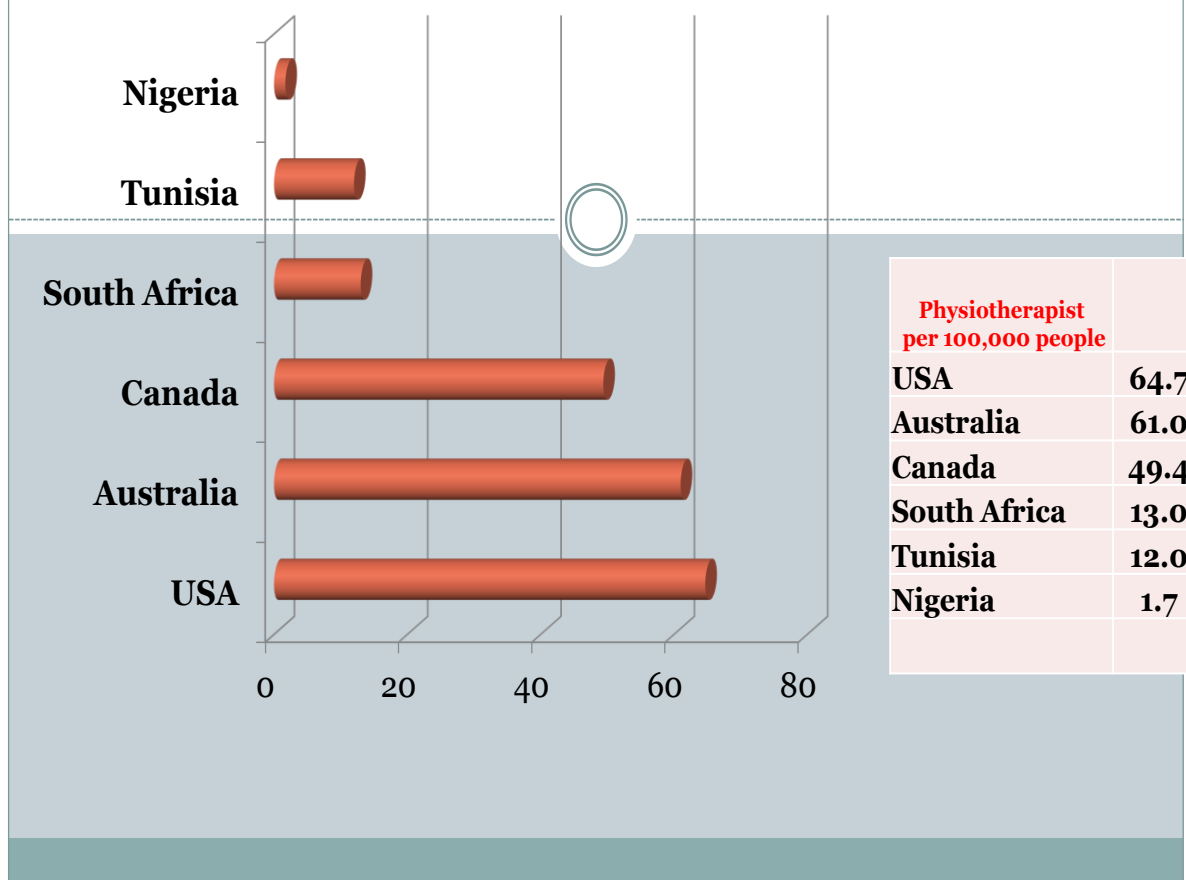
Kogi State with a population of 3,850,400 (by 2011 census projection) currently has one physiotherapist to every 481,300 citizen. Kogi State physiotherapist per resident ratio is significantly dismal than the national data. Nationally, the physiotherapist per resident ratio is one physiotherapist to every 89,258 Nigerian (Balogun & Aka, 2015). Simply stated, Kogi State has about five times less (shortage of) physiotherapists when compared to national data. Comparing the physiotherapist per resident ratio data in Kogi State with the rest of the world makes the physiotherapists shortage more dire and inauspicious.

It is well known that Nigeria has one of the woebegone physiotherapists per resident ratios in the entire world (Table 1).

Country	Population	Number of Physiotherapist (PT)	PT Density 1PT per Resident
Kogi State, Nigeria	3,850,400	8	481,300
Nigeria	178,516,904	2,000	89,258
India	1,252,000,000	30,000	41,733
Egypt	83,386,739	3,000	27,796
South Africa	53,491,333	6,686	8,000
Germany	81,198,000	31,000	2,608
Australia	23,932,593	11,000	2,176
Canada	35,749,600	17,312	2,065
USA	320,090,000	184,000	1,740
UK	63,843,856	51,383	1,243
France	64,982,894	75,164	865
Sweden	9,600,000	13,000	738

Nigeria has 1.7 physiotherapists per 100,000 people compared to 12 physiotherapists for Tunisia, 13 physiotherapists for South Africa, 49.4 physiotherapists for Canada, 61.4 physiotherapists for Australia, and 64.7 physiotherapists for U.S.A (Figure 1).

Figure 1: Global Comparison of Physiotherapist Workforce per 100,000 People



Source: http://www.nigeriaphysio.net/media/archive1/docs/Sanni2014_UIPTAlunmi_Lecture.pdf

The comparative data of the physiotherapist per resident ratio and the physiotherapist workforce per 100,000 people from sample nations around the world, calls for a sober reflection on the part of all Nigerians. Given our nation’s human potential and wealth, I believe our state and federal governments can do a better job, if they are committed to providing quality health care for our citizens.

The only Physiotherapy Department established by the Kogi State government is located at the General Hospital in Lokoja. Regrettably, the

department does not have a befitting physical space for therapy and no discernible equipment for the physiotherapists to do their work effectively. The rural dwellers in Kogi State citizens currently have limited access to physiotherapy services. Citizens from East Yagba (my local government) and the adjoining West Yagba local government areas requiring physiotherapy services have to travel over 200 km to Lokoja. I am told the journey to Lokoja takes over 4 hours to accomplish because of the bad roads in that region of the state.

The treatments provided by physiotherapists often require one or more visits a week for months, and at times for years depending on the diagnosis. The treatment schedules are unrealistic for many patients because of the distance they have to travel and the transportation cost involved. As a result, the treatment compliance rate and health outcomes for many of these patients are depressing because intervention is often delayed and complications would have occurred when they eventually arrive at the hospital. Consequently, many of the patients become despondent and they go in search of unorthodox treatments often with fatal consequences.

Honorable Commissioner Omede, I hope you will agree with me that this situation is morally unacceptable. I, therefore, hereby appeal to Governor Idris Wade to, without further delay, hire more physiotherapists (minimum of 20) and provide a befitting building, equipped with the necessary tools that they need to do their work. If this recommendation is implemented, I am confident that the quality of life of the Kogi people, whom you are elected to serve, will be significantly improved.

Given the existing disparities in access to physiotherapy services, between the urban and rural dwellers in Kogi State, *community physiotherapy* practice model should be adopted as an interim measure to address the

physiotherapy shortage in Kogi State. *Community physiotherapy* in Nigeria was conceptualized and successfully implemented in Oyo State in the 1970s by the late Chief Christopher Ajao. It has been proven to be a practical and cost effective means of leveraging physiotherapy services to the rural dwellers.

Honorable Commissioner Omede, I appreciate your sharing with us, while reading Governor Idris Wade speech, the recent strategic plan by his administration to improve physiotherapy services in Kogi State. It is gratifying to note that Governor Idris Wade's administration has taken the bull by the horn and is now committed to addressing the physiotherapy shortage fiasco in our state. We eagerly await the implementation of his strategic plan.

2015 Conference Themes

The themes of this year's conference are: "Advancing Physiotherapy in Nigeria: The Next Step", "Physiotherapy in Preventive Healthcare: Challenges and the Way Forward." The letter of invitation from President Taiwo Oyewumi requested that I provide "a veritable platform" that will "contribute to the body of knowledge of physiotherapy and to offer a roadmap that will elevate the profile of physiotherapy profession in Nigeria." Ladies and gentlemen, this is a very ambitious charge that I take very seriously!

A "veritable" discussion of the "next step" and "way forward" will require having astrological and psychic powers to predict the future. To provide an indubitable path that will advance the status of physiotherapy profession to the next level of excellence will necessitate using the horoscope chart and crystal ball. Wait a minute; bring forth the horoscope chart and crystal ball

to predict the future of physiotherapy in Nigeria? Mr. Chairman, I was just trying to get your attention in a very special way. No, I was just kidding.

Seriously speaking, I am not an astrologer or a magician, and I would not need a horoscope chart or a crystal ball to carry out my assigned task. As someone who thrives on finding solution to intractable problems, I believe I am uniquely qualified to address the “next step” question confronting our profession.

Purpose of this Presentation

During this lecture, I will proffer a path that can lead the profession of physiotherapy in Nigeria to the Biblical Promise Land of Canaan. As a Christian of the Evangelical Church of West Africa faith, I consider the Promise Land our ultimate destination and destiny as a true profession.

The Biblical metaphor of the Promise Land will be used as the centerpiece of this presentation. Our journey to the Promise Land will be reached when physiotherapy becomes a “doctoring” profession, and physiotherapists are widely respected and legislatively authorized to provide direct access in the prevention and treatment of individuals with functional impairments, and also recognized as experts for promoting the physical health and well-being of asymptomatic individuals.

Conceptual Framework

The late African American human rights activist, Malcolm X rightly stated that *“the future belongs to those who prepare for it today.”*¹ Winston Churchill, former British prime minister, eloquently enunciated that *“it is always wise to look ahead, but difficult to look further than you can see.”*²

Dr. Forrest Shaklee, the founding father of America's number 1 natural nutrition company, reminds us that *"the best way to predict the future is to create it."*²

Prediction of *future* events is an area of scientific inquiry that excites me. I have published, in peer-reviewed journals, over 20 manuscripts predicting several phenomena in physical therapy education, administration, ergonomics and cardiac rehabilitation. I have decided to approach my charge for this lecture from theological and physiotherapeutic perspectives. No, I have not come here to preach, but to use the Biblical metaphor of the "Promised Land" to bring my point nearer home.

As physiotherapists, we are very familiar with taking "next step". During walking re-education, we teach and monitor our patients take several repeated steps until the treatment goal is achieved. The *path to our destiny* will be akin to how we evaluate, plan and implement a walking re-education program for patients with lower extremity dysfunction. From the patient perspective, the "next step" is often onerous, but we physiotherapists always find a way to motivate our patients to achieve the impossible. When the treatment goal is achieved, the patient has figuratively reached the *Promise Land*.

Mr. Chairman, I would like to return to the Biblical metaphor that I referenced a few minutes ago. During the journey to the Promise Land, the Israelites were to take possession of the land that God had promised their forefathers, a land that was "flowing with milk and honey" (Exodus 3:8).

However, upon arrival at Kadesh Barnea, a location that bordered the Promised Land of Canaan, Moses and Aaron sent out twelve spies to survey the land and its people (Numbers 13:18-25).

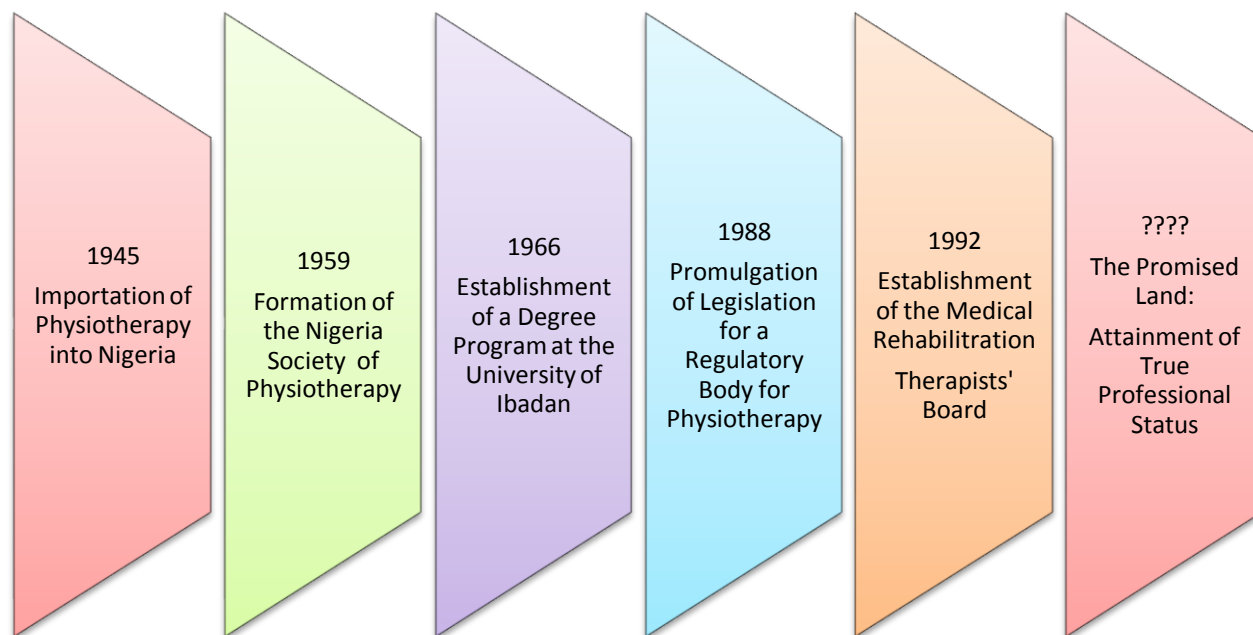
On their return, the spies convinced the multitude that they could not dethrone the dwellers of the land, even though God promised them they could. Their lack of faith brought the rage of God, and God cursed them with 40 years of wandering in the wilderness. Of the twelve spies, only Joshua, and Caleb, who believed God's promise to give the land over to them survive. The unbelieving generation of Israelites died, never stepping their foot in the Promised Land.³

Our path to true professional status will be similar to the Israelites journey to the Promise Land. No doubt, there are many doubting Thomases among our allies, and even within our ranks. It is unclear if we currently have enough believers who are ready to work towards achieving our goal of a true professional status. Furthermore, it is unclear how long the journey to the Promise Land will take us to accomplish; 40 years?

Our Professionalization Journey So far

An evaluation of our professionalization milestones may provide a clue that will enable us answer the question posed. Our journey to the Promise Land began in 1945 when physiotherapy was imported to Nigeria by two British chartered physiotherapists (Miss Manfield and Mr. Williams) with the primary purpose to treat wounded and disabled Nigerians soldiers who returned home from Burma and other countries during World War II (Figure 2).

Figure 2: Our Professionalization Milestones So Far



The NSP was formed in 1959, and the first degree program in physiotherapy was established at the University of Ibadan in 1966. The federal government in 1988 promulgated a legislation to form a regulatory body for physiotherapy; but it took 4 years of dithering by the national government before the Medical Rehabilitation Therapists' Board (MRTB) was finally established in 1992. After the NSP was formed in 1959, it took 33 years to establish the MRTB which was decreed as an amalgam of several health professions, including physiotherapy, occupational therapy, speech therapy, clinical audiology and prosthetics/orthotics. This national government decree was a disappointment to many physiotherapists in Nigeria and in Diaspora who expected a board created solely for physiotherapists.

Clearly, our profession has made modest inroad in our journey to the Promise Land, but the slow pace of our development has been a subject of concern to many NSP members. The pertinent question to ask at this stage of our journey in the wilderness is where do we go from here?

We, physiotherapists, can use the words of wisdom espoused by Dr. Theodor Seuss Geisel (American writer and illustrator best known for publishing children's books under the pen name Dr. Seuss) as our guide to the Promised Land. Dr. Geisel stated: *“You have brains in your head. You have feet in your shoes. You can steer yourself in any direction you choose. You're on your own, and you know what you know. And you are the guy who'll decide where to go.”*⁴

William Jennings Bryan, the American orator, and politician, also reminded us that *“Destiny is no matter of chance. It is a matter of choice. It is not a thing to wait for; it is a thing to achieve.”*¹

A Familiar Alley

In 1989, at the annual National Conference of the Nigerian Association of Physiotherapy Students, I delivered a paper titled “Physiotherapy in Nigeria: Past, Present, and Future,” During the lecture, I made five bold predictions on the future of our profession, and stated that I foresaw within the next five years: 1) a promulgation of a statutory regulation board for physiotherapy by the national government; 2) establishment of an internship program for new physiotherapy graduates; 3) a licensure process instituted by the government for all new graduates; 4) curriculum reforms within physiotherapy profession that will enable students to develop skills in communication, use of computers, ergonomics, industrial fitness and physical diagnosis; and 5) development of two new graduate programs in

physiotherapy in addition to the only one available at the Obafemi Awolowo University (OAU), Ile-Ife.⁵

In an article published in the Official Newsletter of the NSP, Adedoyin in 2001 confirmed that “all the predictions by Dr. Balogun have been virtually fulfilled.”⁶ My batting average in the 1989 prediction is not bad at all. Today, as I embarked on yet another consequential prediction on the future direction for our profession, I will be just as bold in my forecast as I was in 1989. I hope that my batting average will again be just as good or better. For the non-sport enthusiasts in the audience, please pardon my use of battling average sports analogy to illustrate the outcome of my prediction. Batting average is a commonly monitored statistic in cricket, baseball, and softball; it measures the performance of batsmen in cricket and batters in baseball.

The Path to Our Destiny

Dear colleagues, we now have a unique opportunity to create our destiny by transitioning physiotherapy to a true profession with esteem and power. To actualize this vision, I am proposing twelve critical steps (not in any sequential order of importance) as the “Way Forward” in our journey to the Promise Land (Figure 3).

Figure 3: The Path to our Destiny



Step #1: Doctoral Education

Doctoral education is a trait that is common among true professions.⁷A global scan of the status of physiotherapy education revealed that entry-level DPT degree is gaining popularity around the world. This global trend influenced my decision in selecting DPT education as a necessary “next step” to take in our journey to the Promise Land.

The rigor and depth of the entry-level physiotherapy education varies widely from country to country. It presently ranges from a short hospital-based on-the-job training program; common in developing nations, to

extensive education leading to a clinical doctoral degrees now offered in several countries around the world.⁸ Transitional and entry-level DPT education was first developed in the USA at the University of Southern California and Creighton University, respectively. As of January 2015, all accredited and developing educational programs in the USA now offer the entry-level DPT degree that enable graduates to be eligible for the professional license examination in all 50 states, including the District of Columbia. In Canada and Quebec, entry-level physical therapy education is at MS degree level with a few universities offering DPT and Ph.D. degrees in physiotherapy.⁸

UK offers BS and Master of Science (MS) degrees in physiotherapy at 35 universities. The University of Sussex now offers a t-DPT; this is a 5-year research-based program. In the UK, three universities now offer a generic physiotherapy professional doctorate (ProfD.) degree in health science; the title of the degree is consistent with degree awarded by other professions in the UK such as veterinary medicine and pharmacy.

In Australia, six universities currently offer the entry-level DPT and MS in physiotherapy.^{9a} In the Middle East, Iran and Turkey offer BS, MS, Ph.D. and DPT degrees in physiotherapy. In Asia and Oceania, Pakistan in 2008 was the third country in the world to offer the DPT degree program. Today, Japan, Taiwan, India and Australia offer DPT and doctoral (Ph.D. and D. Physio) degrees in physiotherapy. Bangladesh offers a BS and MS degrees in physiotherapy.^{9b}

In African, Egypt, South Africa and Nigeria offer BS, MS and Ph.D. degrees in physiotherapy. In the three countries, BS degree is still the entry-level education required for practice. In Nigeria, physiotherapy education is offered at seven universities: the University of Ibadan, University of Lagos, Obafemi Awolowo University, University of Nigeria, Bayero University, University of Maiduguri, and Nnamdi Azikiwe University, Nnewi. Post-professional MS and Ph.D. degrees are offered at the University of Ibadan, University of Lagos, OAU, University of Nigeria, Enugu, and Bayero University. Post-professional MS degree is offered at Nnamdi Azikiwe University.¹⁰

An emerging trend is that most advanced nations are phasing out their entry-level BS and MS curricula and replacing them with the DPT curriculum. In order for Nigeria to join the league of progressive nations with high quality physiotherapy education we must upgrade our existing entry-level BS education to a DPT curriculum. It is a welcome development to learn from the NSP President of the ongoing discussion among the National University Commission (NUC), MRTB, and NSP on the proposed implementation of a DPT program in Nigerian universities. Besides the entry-level DPT program, Nigerian universities need to develop a fast track curriculum for physiotherapists with BS and MS degrees to earn the transitional doctor of physical therapy degree (t-DPT) degree.⁸

While the consultation among the NUC, MRTB, and NSP has been ongoing for three years now, a whopping 40% of the physiotherapists in Nigeria perceived the BS degree to be adequate for autonomous practice.^{11a}This perception is a cause for alarm and demonstrates the urgent need to educate the NSP members of the imperative to upgrade the existing entry-

level BS education to a clinical doctoral curriculum. In line with Pope John Paul II thesis, that *“the future starts today and not tomorrow,”* I submit that the education of our members must begin today and not tomorrow.

The curriculum of the proposed entry-level DPT program must be designed to meet international standards and must allow for diversity in the content domain; it should not be a “one size fits all” curriculum. In addition to the generic concepts taught in the baccalaureate degree program, the DPT curriculum must include the following course contents: exercise physiology, exercise prescription and monitoring, pharmacology, radiology/imaging, pathology, physical diagnosis, advanced research methodology, biostatistics, evidence-based practice, public health behavioral sciences (communication, social and psychological factors, ethics and values, law, entrepreneurship and management sciences, clinical reasoning), patient/client management model, disease prevention, wellness, and health promotion, practice management, management of care delivery, social responsibility, advocacy, and core values. The above course contents are essential because of the expanded role of the physiotherapists in health care as a “first line contact” practitioner.

The NSP leadership must ensure that the implementation of the entry-level DPT education takes place concurrently in all the universities. We must never repeat the mistake of the past when at a point in our history, we had multiple entry-level education pathways (certificate, diploma, and degree) in our profession. In the 1970s, this situation was a source of confusion to the bureaucrats in federal and state civil services; it was also a public relations’ disaster in marketing and branding our profession.

Doctoral education in physiotherapy is costly to develop and sustain at a high level of performance. We cannot afford to develop substandard DPT programs that will produce “half-baked” practitioners who will be incapable of functioning as “first line contact” clinicians. To prevent this from happening, the NUC must adequately fund our universities offering physiotherapy education. Funds are desperately needed to develop research and instructional laboratories, recruit competent physiotherapist educators and to purchase state-of-the-art measuring tools that are needed to accomplish meaningful clinical research.

Step #2: Unique Body of Knowledge

Another important trait that is sacrosanct to true professions is the development of a unique and esoteric body of knowledge.^{12, 13} This “next step” requires a global effort on the part of all physiotherapists. A distinct body of knowledge for physiotherapy was proposed in 1975 by Dr. Helen J. Hislop in “The Not So Impossible Dream” speech that she presented during the 10th Mary McMillian memorial lecture at the 51st annual conference of the American Physical Therapy Association, Anaheim, California.¹⁴ Dr. Hislop, in her lecture, provided a compelling case for adopting “pathokinesiology” as the science of physiotherapy.

A modicum of progress was made in the last forty years to build upon Dr. Hislop’s pathokinesiology paradigm, but our knowledge base is still not infallible and incontrovertible. The majority of the studies that investigated the therapeutic efficacy of our interventions were poorly designed with limited external validity. Physiotherapy profession today desperately needs double-blind, randomized control and meta-analysis studies to conclusively demonstrate the efficacy of our treatments. Nigerian physiotherapists have a role to play in this global research effort by focusing on the effects of

physiotherapy intervention on diseases that are peculiar and endemic in our local environment.

Step #3: Commitment to Research that Improves Quality of Life of Nigerians

To garner professional esteem from the general public, we must engage in research that improves the quality of life of the Nigerian people. Specifically, we need to identify effective preventive and treatment methods for the following top ten causes of death in Nigeria: respiratory infection (19%), malaria (20%), HIV (9%), diarrhea diseases (5%), road injuries (5%), protein-energy malnutrition (3%), cancer (3%), meningitis (3%), stroke (3%), tuberculosis (2%) and other diseases/sequela (27%).¹⁵

A major constraint that researchers in developing countries face is the limited grant opportunities available to both seasoned and young investigators. To address this barrier, the NSP members should donate generously to the Nwuga's Research Foundation; and participate in canvassing for funds, on behalf of Nwuga's Research Foundation, from moneybags in our society and from local and multinational corporations. The funds generated should be appropriated exclusively to support the research agenda of our burgeoning physiotherapist investigators. Funding priority should be given to investigators who address the top ten causes of death in Nigeria.¹⁶

Step #4: Professional Autonomy

Professional autonomy is a sine qua non for true professional status.¹⁷ The World Confederation for Physical Therapy (WCPT) has consistently advocated for professionalization of physiotherapy.¹⁸⁻²⁰ In 2011, the WCPT

issued a global policy statement to its members to rise to the challenge of making physiotherapy a true profession by advocating for relevant legislation that will lead to direct access practice in member countries.

In the USA, physical therapists now have some semblance of direct access in all the 50 States and the District of Columbia. Similarly, physiotherapists in South Africa are first contact (“first line”) practitioners because they are legally authorized to independently “diagnose, treat and refer patients to medical specialists, imaging and also issue a certificate of illness.”^{21a} While having first contact practice privilege is a major progress in the journey to the Promise Land, but first contact practice in itself is not a substitute for true professional status. The wider recognition of physiotherapy as a true profession even in countries with direct access legislation (USA, Australia and South Africa) is still elusive. On the contrary, Williams, Brown and Onsman, in 2009, contends that physicians, surgeons, dieticians, pharmacists, physiotherapy and nursing have achieved true professional status in Australia. The occupations they classified as semi-professions are: paramedic, optometry, podiatry, social work and optician.^{21b}

Let me be clear, to reverse the existing legislation that prevents physiotherapists from having direct access to their patients will not be easy. The pertinent question is: do we currently know our foes and allies in the inevitable heavy lifting ahead? The overwhelming majority of the NSP members perceived physicians (71%) and politicians (65%) will be the opposition to any legislation that will grant physiotherapy autonomous practice.¹

The medical establishment and politicians will express concerns for public safety based on the erroneous perception that physiotherapists are unable to decipher and diagnose diseases as a result of limited course content in pathology.²²⁻²⁵ The opposition may also argue that granting direct access to physiotherapists will lead to increased health care cost; since patients may still seek physicians' consultation.²⁶ To the contrary, there is growing empirical evidence that showed that granting direct access to physiotherapists resulted in enhanced quality of care, fewer physician visits, and reduced healthcare costs with no undue risk to patients' safety.²⁷⁻³² When the DPT education is in place, the above concerns will no longer be tenable since the curriculum submitted to NUC for approval contained course contents in pathology, imaging, and physical diagnosis.

The elimination of the cost of paying a physician to make a referral; and early access to treatment are known advantages of patients having direct access to physiotherapy services.³³ In our lobbying effort to educate legislators and physicians, the NSP leadership and individual physiotherapist must be able to adduce convincingly the advantages of physiotherapists having direct access to their patients.

Nigeria currently has a democratic political system that seems to be thriving. Lobbying of government bureaucrats and legislators is universally recognized as one of the core process of doing business in a democracy. I was reliably informed that the NSP now retains a law firm with the primary purpose to influence legislations that may impact the interest of physiotherapy profession. The NSP leadership, without further delay, must allow our lobbyists to initiate legislation that will advance our case for professional autonomy.

As a first major step, the NSP and MRTB should co-sponsor legislation at the National Assembly that will make physiotherapists “first line” contact practitioners educated to diagnose independently, treat and refer patients to other medical specialists; and to prescribe medication. Yes, you hear me right, physiotherapists to prescribe medication. My view is in line with the right recently granted to a cohort of physiotherapists with advanced pharmacology training in the UK.³⁵

This landmark development, which is first in the world, is expected to decrease bureaucratic clinical practices, free up physician’s time, and subsequently lower health care cost. It is worth pursuing legislation that will grant physiotherapists the right to prescribe medication. My view is informed by the fact that our profession is on the verge of becoming a “doctoring” occupation that will produce graduates with the cognitive knowledge and clinical competence expected of a first line contact practitioner.

Introduction of medication through the skin is not new to physiotherapists. After all, iontophoresis, (a technique of introducing medicinal ions into the body by applying modulated direct current through the skin), and phonophoresis (use of ultrasound to enhance the delivery of topically applied analgesics and anti-inflammatory agents into the body) therapies are provided by physiotherapists around the world to promote wound healing and in the management of musculoskeletal injuries.³⁶ It is my humble opinion that physiotherapists should have the latitude to introduce medication percutaneously when they are clinically indicated.

Step #5: Professional Expertise

True professions have technical, specialized and highly skilled work that is often referred to as “professional expertise.” This expectation requires regular updating of clinical skills through post-professional education and continuing education life-long learning practices.⁷No physiotherapist should repeat the mistake that some of our pioneer physiotherapist educators made by neglecting to take advantage of graduate level educational opportunities at a critical time in their career. Our universities can explore faculty training exchanges and articulation agreement with foreign universities with Ph.D. program in physiotherapy. The effort of Dr. Emmanuel John in developing a post-professional DPT linkage agreement with the University of Michigan-Flint is a model program that can be replicated by other universities. Over a dozen physiotherapists from Nigeria have graduated from this online program; some of the graduates are now employed as faculty and clinicians in hospitals and clinics throughout the country.

There is broad agreement among the NSP members of the need for post-professional training.¹¹ Unfortunately, the number of Ph.D. graduates produced at our universities is incapable of keeping pace with the demand for faculty in the academy. This situation is a bane to our existence as a profession because we need faculty to educate the next generation of practitioners, and we also need specialists on the cutting edge of clinical practice to deliver high-quality physiotherapy services. To ameliorate the prevailing faculty shortage, our universities must harness the expertise of Nigerian physiotherapists in Diaspora by inviting them to their institution to teach for a short period or to conduct workshops on topical issues in physiotherapy.

Physiotherapists with baccalaureate or entry-level DPT degrees can develop professional expertise through advanced clinical specialists training in a domain of physiotherapy practice.³⁷ For example, in the USA, graduates of the entry-level DPT program have an opportunity to continue training in a residency and fellowship programs. Approved residency programs are between 9 and 36 months while approved fellowships are between 6 and 36 months. A fellowship program through residency training and a board examination is offered in other countries such as Australia and Scandinavia.⁸

Nigeria has adopted the British model of medical education with the establishment of the National Postgraduate Physiotherapy College to provide residency training program in eight specialty domains of physiotherapy; fellowship programs by examination, election, and honorary awards.³⁸ It is now common knowledge that the NSP and MRTB are co-sponsoring a bill in the National Assembly to formally register the College and to provide annual budget needed to fulfill the stated mission. Although the College is yet to admit students, it appears the fundamental framework for a functioning institution is in place; and this is a welcome development in our journey to the Promise Land.

For the fellowship program of the College to have academic credibility, the curriculum design must be comprehensive with emphasis on acquisition of clinical skills. Producing “half-baked” clinical specialists will make our profession a laughing stock among other health professions in Nigeria and internationally. If this unthinkable situation arose, that would make our journey to the Promise Land a difficult or impossible task. We cannot afford to fail in this effort. Consultations on pedagogy related issues with Nigerian

physiotherapist educators in Diaspora will be helpful in the early years of implementation of the College programs.

Nigeria is perceived currently around the world as a corrupt nation in disarray; and a nation besieged by the terrorist group, Boko Haram. The current security situation in Nigeria is a concern that will derail the implementation of any university-based linkage agreement. Our security situation has to improve for foreign universities to be willing to send their faculty and staff to a pariah nation. President Mohammed Buhari's administration must work hard to stem the tide of corruption that has eaten deeply into the fabric of our society; provide the support needed to defend the nation and restore law and order in the country.

Step #6: Licensure

The extant literature revealed that licensure process following a university-based education is considered one of the traits of true professions.⁷ Licensure is a quality assurance procedure that reassures the public at large that a profession is to be trusted and respected.³⁹ Graduates of physiotherapy programs in Nigeria are currently mandated to write a pre-induction examination before participating in the internship program, but no formal assessment is undertaken at the end of the internship experience.

It appears to me that the “pre-induction examination” process “placed the cart before the horse.” The academic transcript from an NUC accredited university will be adequate in confirming the knowledge base of new graduates wishing to enroll in an internship program. After the one year internship experience, formal assessment procedures should be instituted by MRTB to objectively evaluate the cognitive knowledge and clinical competencies of all new physiotherapists. We need to rethink and elevate

the quality assurance programming for our profession to restore public confidence in the clinical skills of all physiotherapists practicing in the country.

I was reliably informed that out of the 2,000 physiotherapists currently practicing in the country only about half border to renew their license annually.⁴⁰ It is unacceptable to have physiotherapists working with expired license. Practicing physiotherapy without a license should carry civil or criminal penalties. The MRTB must be granted the authority, if they do not currently have the power, to revoke the license of practitioners who are incompetent, or those who engage in unethical and criminal acts.

Step #7: Professional Ethics and Integrity

Professional codes of ethics and standards are required attributes of true professions.^{12, 13, 17} Physiotherapists need to maintain an image that reflects high integrity and operate on sound ethical principles as dictated by the professional ethical code of conduct. In the quest for exorbitant financial gains, some of our colleagues are often tempted to compromise the ethical code of the profession. Although the NSP currently has ethical codes of conduct, there is the perception that the ethical standards are not uniformly enforced among the members. The laxity in enforcement of the ethical code must be rectified to uphold the integrity of the profession.

In life, perception is everything and at times perception is a reality. Our profession cannot afford the perception by the Nigerian people, that we are ragamuffins and charlatans. The Nigerian people will constantly judge the ethical compass of our members, and in the process indirectly, either positively or negatively, judge our profession. The NSP should have an active process in place to monitor member's ethics and those who are

ethically challenged and unable to abide with the code of conduct of the profession must be disciplined.

Step #8: Public Service

Historically, true professions enjoy high social status and esteem within the society.^{12, 13, 17} High esteem arises primarily from the valuable altruistic and social roles of the profession's work. We can enhance our stature in the larger society, if physiotherapists are mandated as a condition for license renewal to show evidence that they engaged in public service or provide pro bono physiotherapy services in their communities.

This worthwhile goal can be achieved by having physiotherapists volunteer their service with international agencies such as the Red Cross, Salvation Army, and Doctors without Borders. Furthermore, the NSP leadership should cultivate positive media relations; and widely disseminate information about physiotherapists who participates in humanitarian, and public service initiatives in electronic, print and social media.

Step #9: Financial Rewards

The power and status that a profession commands, vis-à-vis the image and desirability of that profession is greatly influenced by financial rewards and remuneration.^{11b, 12, 13, 17} To garner the prestige that we desperately need, the Nigerian public at large must perceive physiotherapy profession to be financially and professionally rewarding as a career. When physiotherapists receive attractive condition of service that is commensurate with other health professions requiring similar years of education, the image and prestige of our profession will be elevated to the first-tier choice of professions that high school students seriously consider. With the DPT education in the pipeline, now is the opportune time for the NSP to make a compelling case to the national government to create career pathways that

will enhance the take-home salary, and career mobility of the DPT graduates that will be employed within the health care system.

Step #10: Collaboration with other Health Professions

As physiotherapy steadily moves toward true professional status, the NSP leadership must be strategic in forming labor alliance with other health professions. An alliance with vocational careers or professions with less esteem and prestige will further erode the credibility of our profession. From inception, our education and clinical practices were shaped in tandem with the medical model. This approach has over the years enhanced the credibility of our profession within the medical communities, academia, and the society at large.

It is unfortunate that there are certain individuals within our rank who in recent years have fought hard to reverse the paradigm that our forefathers instituted. In my view, a departure from the organizational (academic and clinical) structures and practices on which the foundation of our profession was solidly anchored will obliterate years of hard work and the steady progress made in moving our profession closer towards true professional status.

Step #11: Accountability and Advocacy

A core trait of true professions is accountability at the individual patient, society, and the profession's levels. Physiotherapists around the world are held accountable for fulfilling the implied agreement governing the patient/practitioner role; and in abiding with the ethical codes of practice of the profession.^{41, 42} The society at large will in the future hold our profession accountable for the physical-well-being and rehabilitation health of the nation. Therefore, on an ongoing basis, under the mandate of the NSP, the

researchers funded by the Nwuga Foundation must be made to evaluate the quality of care provided by physiotherapists in different clinical and community settings, and the overall impact of physiotherapy services on patient's quality of life.

Advocacy is the act of supporting a social issue or policy. All physiotherapists have a moral duty to be an advocate for at least one social cause. Effective advocacy can positively influence public policy, laws and budgets that affect our profession. Recruiting an army of physiotherapists who are committed to reversing the existing obnoxious legislation controlling the practice of our profession is a worthwhile social cause that we should all embrace today and move forward with a grass root campaign to educate the legislators at the National Assembly.

Step #12: Rebranding our Public Image

True professions work hard to develop a positive image and also work hard to protect it. Our profession currently has a name and image problem; only 16.8% of Nigerians living in the rural areas of the country are aware of physiotherapy profession, and 60% of the rural dwellers associate physiotherapy with masseurs, and 30.8% with physicians.^{11b}

In many of the local Nigerian languages, physiotherapists are called Dokita ("doctor"). The word "Dokita", carries great respect and prestige, but critics pounce when physiotherapists are referred to as "Dokita" because our educational training is still at the baccalaureate level. Once we produce the first set of DPT graduates, they can legitimately be called "Dokita"; that landmark development will no doubt enhance the image of our profession within the general public at large.

On a cautionary note, the use of the title "doctor" by physical therapists working in the clinical setting is still controversial in many countries around the world.⁴³ A DPT graduate working in the clinical milieu is entitled to use the title “doctor” but must clearly include in his/her clinical notes the “PT” or “Physio” acronym to prevent being confused with a physician.

Our profession is often misrepresented in the local Nigerian languages. We need “catchy” and easily understandable terms that will clearly define our unique clinical roles in healthcare. This is particularly important to market our profession to the younger generation of students in primary and secondary schools and universities. As a matter of urgency, we need to carve a unique identity that will represent the essence of our profession.

As an undergraduate student at Ibadan, in the 1970s, the Yoruba language newscasters often call physiotherapists “*Awon oisise kó'moórìn*” or “*dókítà kó'moórìn*” and “*Awon oisise to nto egun*”, *dókítà eléegun* or “*dókítà to nto égun*.” *Awon oisise kó'moórìn* translated means, the health worker that teaches a child how to work. The names *dókítà kó'moórìn* or *awon oisise komorin* referenced the walking reeducation program that physiotherapists use to facilitate the mobility of children with lower extremity impairment. During that era, poliomyelitis and cerebral palsy was an endemic pediatric scourge. The name “*dókítà kó'moórìn*” delimits the scope of practice of our profession to pediatric care, and should therefore not be encouraged. The name “*dókítà eléegun*” or *Awon oisise to nto egun* is often used to describe physiotherapists working with athletes.

The term “*Dokita to nto egungun*” is more descriptive of a bone setter,^{11b} than the role of physiotherapists in prevention and management of sports

injuries. The names “*dókítà eléegun*” or *Awon osisé to nto egun*” is a misnomer, and, therefore, inappropriate for us to embrace. A more appropriate name that exemplifies the therapeutic role of a physiotherapist in sport is “*dókítà to nto ésan*”, translated as the doctor that realigns/manipulates/treat the muscles and ligaments.

A more encompassing name that describes our role in health care is “*dókítà tó nfi ọwọ wo aisan*”; translated as the doctor that uses his/her hands to aid healing and recovery from injury/disease. The above term brings to focus the hand as the primary therapeutic tool of the physiotherapists. The use of the term “*dókítà tó nfi ọwọ wo aisan*” is consistent with the NSP’s ongoing “hand” branding campaign. The term “*dókítà tó nfi ọwọ wo aisan*” should be pilot tested in a focus group (market analysis) research to determine its viability and effectiveness. If the market analysis research found the term “*dókítà tó nfi ọwọ wo aisan*” to be effective, the NSP should embrace its use and translate it into the various local languages, and launch a nation-wide public relations campaign by collaborating with the mass media.

One of the barriers against semi-professions transitioning to true professional status is the perception that semi-professions are dominated by women and therefore they engage primarily in "women's work." This sexist perception elevates the prejudices against semi-professions regardless of the amount of skill involved in the profession.⁸ In several countries around the world, physiotherapy profession is female-dominated with concomitant sexist prejudice; an added burden to overcome in attaining true professional status.

The NSP members is presently overwhelmingly (>60%) male-dominated, and physiotherapy profession is not perceived as a “women’s career” in Nigeria. To increase diversity in the clinical and academic environments, concerted efforts should be made by the administrators and faculty members in the seven universities currently offering physiotherapy to attract more females into our profession.

Mathematical Model

My discussion so far can be represented in a mathematical model that will capture the twelve recommended steps (X_n) proffered during this lecture. How fast we get to the Promise Land, our destination (Y), if we assumed a linear relationship between Y and X can be predicted using a multiple regression method.

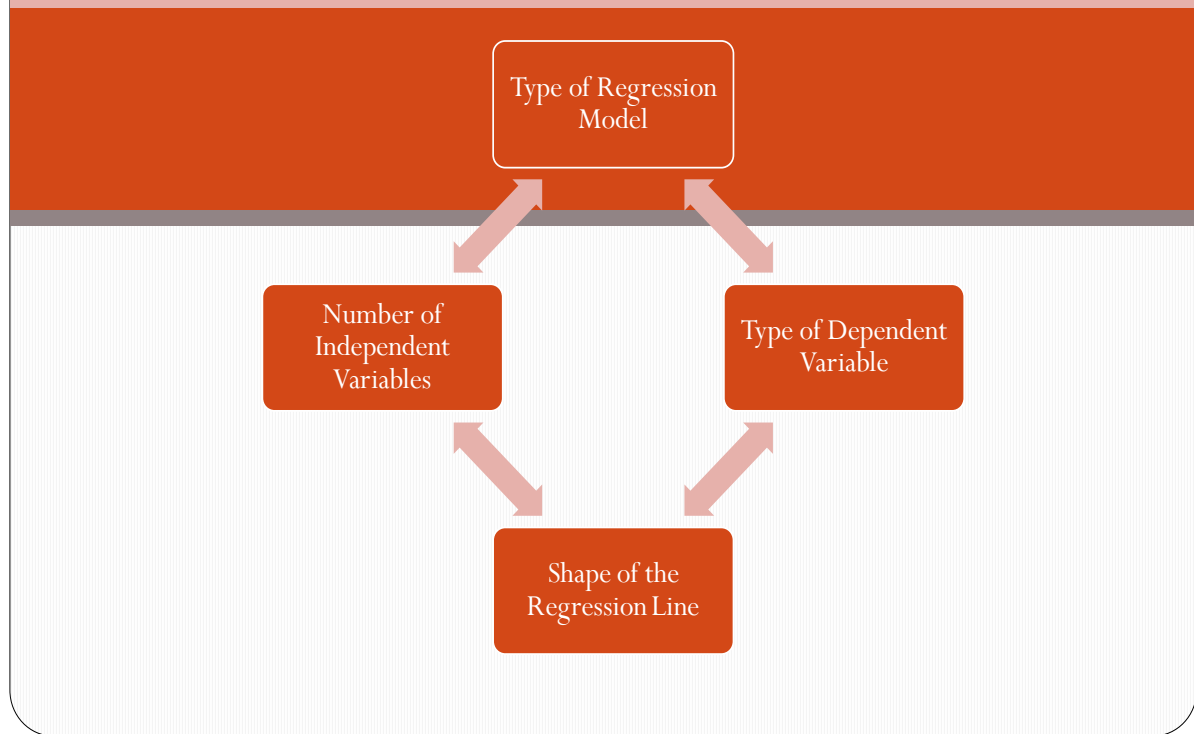
$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 \dots b_nX_n$$

a = intercept; b = regression coefficient

X_1, X_2, \dots, X_n are the twelve steps proposed in this lecture as the “way forward” that will lead our profession to the Promise Land. How useful each independent variable can be used to predict how fast to reach our destiny, will be a function of the coefficient of determination (R^2) derived from the mathematical equation.

The regression model to use for our prediction will be influenced by the number of independent variables, type of dependent variables and shape of the regression line⁴⁴ (Figure 4).

Figure 4: Factors that Will Influence the Type of Regression Model to Use in Predicting the Outcome of Our Journey to the Promise Land



Given that our dependent variable is binary in nature (Success or Failure to reach the Promise Land), the logistic regression model will be the appropriate statistical analysis. Here the value of Y will range from 0 to 1 and it can be represented by the following equation.⁴⁴

Odds = $p / (1-p)$ = Probability of event occurrence / Probability of event not event occurrence

$\ln(\text{odds}) = \ln(p/(1-p))$

$\text{logit}(p) = \ln(p/(1-p)) = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + \dots + b_kX_k$

In the above equation, p is the probability of getting to the Promise land.

In the years to come, I will encourage my colleagues to test the relevance and applicability of my proposal and the relevance of using logistic regression model in predicting our journey to the Promise Land.

A question that is relevant to asked is: how do professions know when they have attained true professional status? We will know we have reached our destiny, the Promise Land, when our profession commands esteem, power and influence in the larger society, among legislators, and within the government. Freidson inferred that “professionalization is perception; the public recognition of an identity conferred from without. Essentially a vocational pursuit becomes a profession when enough people agree that it is.”¹³

Conclusion

During this conference, I observed a lot of energy and positive dialogue among the participants. This is a dramatic development that I cannot remember experiencing during my short stay in Nigeria in the 1980s. I am most impressed about the number of physiotherapists who have completed their terminal degree and engaging in productive research. This is a positive development for our profession.

Physiotherapy profession in Nigeria is at the precipice of transitioning to the next level of excellence. The recommendations that I have presented during this lecture are not meant to be “prescriptive” nor should they be taken as a list of guarantees that will lead us to the Promise Land. My hope is that the recommendations that I presented in this lecture will be used to jump-start a national conversation on the future of our profession.

When I based my assessment on our track record and pace of development as a profession, I came to the conclusion that physiotherapy in Nigeria will attain true professional status within the next two decades; half of the time span it took the Israelites to reach the Promise Land. However, if we worked hard together as a collective, we may be able to cut down the time frame to reach the Promise Land to under a decade. This is a challenge and not an impossible goal to set for our profession. My thesis for a shorter timeline was based on the fact that our profession now has a viable and elastic resource base potential. Physiotherapy profession in Nigeria is experiencing a renaissance from past obscurity and mediocrity within the academy into a respectable healthcare discipline that is beloved in the ivory tower and gradually gaining respect within the public at large.

My fellow colleagues, I hate to disappoint on the timelines that I have predicted; there are no quick fixes in getting to the Promise Land. The journey is not for the faint hearted or the weak. I am honored to be able to provide a path that will lead us to our destiny.

In years to come, our presence here this morning may be symbolically compared to the 1963 March on Washington led by US civil right leader Martin Luther King when he delivered his historic “I Have a Dream” speech which was directed at the conscience of a weary American nation to improve urgently race relations and end racism.⁴⁴ As a sexagenarian, I may not live long enough to see the day when physiotherapy will be widely acclaimed as a true profession in Nigeria. One thing that I am certain is that as a profession we will get to the Promise Land.

I believe we will leave this 55th annual conference with differences of opinion on the strategies to be used in the implementation of my recommendations, but I hope we will remain united in our determination

to transition our profession to the next level of excellence. If we came together as one, with pride, our hearts would swell to call ourselves physiotherapists. We are individually made for this moment to achieve great things for our profession and together we shall succeed.

Reaching our destiny will require our collective efforts

Our Destiny is in our individual Hands

We have the power to control our Destiny

Let us rise and seize this moment to face the challenges yet to come.

Thanks for listening to my points of view on the way forward in transforming physiotherapy to an autonomous and esteemed profession of choice for young college bound Nigerian children. God bless the NSP, God bless the Federal Republic of Nigeria, and God bless the United States of America, my adopted country!

Acknowledgement

I would like to recognize key individuals in my personal and professional life. First and foremost, I am indebted to my number one fans, my wife and our four God given children, for their steadfast support and for providing me the time and space to put in my best as a faculty and university administrator for over three decades. I am beholden to Dr. Chidozie Mbada for sharing his two recent studies on professional identity and professional autonomy; and bringing to light some of the references in this report.

GLOSSARY TO THE PRESENTATION

The Biblical Promised Land

The Biblical Promised Land is the territory promised by God to the Israelites, the descendants of Jacob. The promise was first made to Abraham (Genesis 15:18-21) and then renewed to his son Isaac, and to Isaac's son Jacob (Genesis 28:13), Abraham's grandson. The Promised Land was described in terms of the territory from the River of Egypt to the Euphrates river (Exodus 23:31) and was given to their descendants after the Exodus (Deuteronomy 1). The Promise Land area is where the state of Israel now occupies; it is their destiny to occupy the Land and it took years and generations of Abraham for the Israelites to have a home land

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The picture with the title Confluence of Niger & Benue River, Lokoja, Nigeria was taken by the photographer Michael Heinisch on 16 April 2009.