Fifty Years of Physiotherapy in Nigeria: Trends, perspectives and future direction

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SUMMARY

Knowledge of the determinants and evolution of quality in health practice and training enriches our understanding and interpretation of the current trends and also deepens our perspective on the future direction of the physiotherapy profession and training. This article describes the emergence of the dominant model of physiotherapy practice and training. The paper discusses historical trends in the perception of medical practice and professional training and relates this to the contemporary trends and the future direction of physiotherapy in Nigeria. It articulates a path of growth to maturation of the physiotherapy profession in Nigeria that would lie in maximizing and leveraging the capabilities of the Nigerian professional organization, provide an enhanced basic, preferably doctorate level professional education, and opportunities for specialization.

Key words: physiotherapy, Nigeria

INTRODUCTION

From prehistory up to the period of the ancients, techniques and physical modalities such as massage, water, exercise and heat, as well as other agents such as herbs, were part of the armamentarium of the healer for healing the sick. As with the birth of modern physiotherapy in the late 19th century,[1] the differentiation of the healing art into different disciplines and professions is a recent development which also began in the 19th century.[2]

Experts generally consider healing to be a cultural as well as a scientific pursuit, with variations between nations and cultures. In many societies in the past and until the present, scientific medicine and the healing arts have been viewed as a symbol of civilization and as vehicles of national prestige.[2] Historical analysis shows that there are strong links between national dominance and perceived superiority in medical and health practice and training.[2] In many parts of the world, the prestige of having worked in a well-regarded foreign medical culture remains an important factor in the perception of a physician's skills and quality.[2]

Knowledge of the history of the quality of health practice could serve to enrich our understanding of the origin of the healing professions and their evolution, and the future outlook and direction of health care. The context in which the physiotherapy profession emerges in any country provides a perspective from which current trends could be better interpreted. Such information would also indicate the future direction of physiotherapy and how this could be influenced for the benefit of a society.

The apparent emphasis on the evolution of medical arts and science in this study is not so much for its sake, as it is for the deductions that this important information allows us to make regarding the evolution of disciplines such as physiotherapy, following their emergence from medicine. Compared to medicine, there is a paucity of historical accounts of other disciplines including physiotherapy, perhaps due to their relatively shorter period of emergence. The dearth of detailed historical accounts of physiotherapy may also be attributed to a possible presumption by medical historians that this discipline is an integral part of medicine even long after its emergence.

Evolution of Healing Models

The flow of medical information reflects the political domination of Japan by China as early as 200 BC[3] According to historical reports, Chinese healing practice was dominant in Japan in 1542 and in the succeeding centuries.[2-3] In 18th century Europe, in the wake of the French revolution, a precursor of modern democracy, the French health care system emerged as the model for other countries.[4] As the world acclaimed centre of Western medicine in this era, the French medical system was widely revered, and attracted trainees from across Europe and America. French medicine was characterized by the observation of patients and the clinical pathological correlation of signs and symptoms which identified medicine as a process of science, adventure and discovery.[2]

Germany attained political and economic eminence towards the end of the 19th century and became the model for medical practice and training.[2] From then until 1914, German universities assumed prime prominence and stature. The face of medicine in German universities was then depicted by the new scientific specialties including pathology, bacteriology, anatomy, physiology, ophthalmology, and other clinical sciences. Between 1900 and 1920 the US became the dominant economic and political power in the western hemisphere and beyond.[2]

Citizens' passion for law and statistics in all spheres coloured the perceptions of medicine in the US.[5] According to Holmes,[5] the 'observing and computing mind' in the US has made the words 'law' and 'average' into the 'two dominant words of our time'. The notion of healthcare practices as quantifiable and measurable became popular among academic medical elites in the US and affected their general perception of quality. Perhaps, in addition to their interdisciplinary philosophy of care, this perception is believed to have greatly contributed to the rapid evolution of the physiotherapy profession and training in the US, compared to the pace of the profession's evolution in the former dominant countries.

Medical and health practice has technical and cultural components.[6] Competence in the technical components refers to the ability to perform specific tasks in a given situation, while competence in the cultural components is the nuanced understanding that enables individuals within a culture to communicate effectively with patients and health professionals and to select culturally appropriate diagnoses and treatments. Based on what they see through their national and personal lenses, trainee visitors to a dominant country can be guided on the different components of practice to focus on during training.

Trainees from different cultures may not only be interested and therefore place emphasis on different components of medicine, but may also be interested in different aspects of a component. As an example, English students were more interested in the institutions and in the organization of French medicine than those from other countries such as the US and Russia.[2] English medical trainee visitors may have focused on the institutions and the organization of health care in France perhaps because the technical components of practice in France and England were deemed to be comparable by the visitors from England at the time.

As a result of the colonial affiliation of Nigeria, physiotherapy practice and training in this country was fashioned after the British model, which was itself modelled after the German model. This model of medical system and training is characterized by a medical school and its university teaching hospital, with the dual headship of the clinical and the academic department in the teaching hospital and university respectively.

The American model of education and practice represents the dominant trend today. It is doubtful if the US economic and political dominance and its influence on the perception of quality will wane in the foreseeable future. Furthermore, in the past two decades Nigeria has lost more of her physiotherapy personnel to the Unites States than to other parts of the world combined. The US model of physiotherapy practice and education viewed with Nigeria's national lens and flavoured with its experience therefore should be the template for Nigeria.

The extant literature shows a strong link between national dominance and perceived superiority and quality of medicine and by extension, physiotherapy practice and training. It also shows that professional education and health practice have long crossed

national boundaries in the quest for learning. For a long time, the quality of health care and service was often viewed through cultural affiliations and defined largely by the academic elites in a country. Furthermore, historical precedents established through available literature place the responsibility for the improvement in the quality of health care practice, delivery and training on dominant countries.

Contemporary Issues and Analysis

A human service profession is generally regarded as a calling, with specialized knowledge, often requiring long and intensive academic preparation, and is characterized by registration and requires the practitioner to be licensed. An organized and mature profession also provides opportunities for specialization for its members. A professional is someone who has a high degree of decision making power; and members in a guild are expected to be concerned about the quality of their service, should advocate for their clients and are guided by a code of professional practice. The development, status and scope of practice of a profession could vary between countries.

Presently, there is a trend towards post baccalaureate degree preparation for physiotherapists. In the current leading model, over 90% of programmes in the United States offer clinical doctorate degrees in physiotherapy.[8] Many Nigerian immigrants in the United States are believed to have taken advantage of the transitional doctor of physical therapy programme designed for licensed physiotherapists. It is fair to say that physiotherapy education in Nigeria reflects the prevalent status in many parts of the world with baccalaureate degree preparation. However anecdotal reports show overwhelming preference for upgrades in entry-level professional education in Nigeria. In addition to the worldwide US influence, it is plausible that the preference of Nigerian physiotherapists for upgrades could be attributed to the influence of their compatriots based in the United States of America.

Given the vast body of knowledge contained in the sciences and the arts that embody physiotherapy, and in response to the new challenges and new areas due to advancements in health and medical technology that have helped to improve life expectancy, specialization has been instituted in the United States, Australia and Canada.[9-11] In the US, deserving practitioners are certified as specialists in eight areas while Australia has developed a specialization process in five areas. At present, residency programmes exist in the US, Canada and Australia,[10-12] and perhaps the Nordic countries. At present in Nigeria, no specialization programme has been initiated.

In the past two decades, Nigeria has not only lost many physiotherapists to the US,[7] it has also provided physiotherapists with advanced degrees and teaching experience to some training institutions in other African countries. Due to its economic and political influence, Nigeria is regarded as a regional power within the West African sub-region. As a dominant country within the region, it is imperative that Nigeria also assumes responsibility for the improvement in the quality of physiotherapy practice and training, for the benefit of the people in this part of the world. The status and the future direction of physiotherapy in Nigeria therefore have implications for the development of the profession in other African countries. It is hoped that the ever-expanding cultural influence of the US and the input of Nigerians who have trained and practised in America will facilitate this.

DISCUSSION

The profession of physiotherapy has evolved in Nigeria during the past 50 years. In the first three decades, physiotherapy was viewed as a sub-profession with limited advancement opportunities in the civil service. Presumably, the objective of any professional body is to grow and advance the profession by gaining full autonomy and by increasing its prestige. As clients may not always be the best judge of their own needs and the quality of physiotherapy service, the profession must assure ethical standards and be the advocate for its clients. As the body that represents the professional interests of physiotherapists in Nigeria, the Nigeria Society of Physiotherapy (NSP) should also be concerned about its members' welfare.

Two decades ago physiotherapists were assured

of jobs after graduation, while that is not the case today. The physiotherapy profession, just like other professions, is being shaped by the interaction between its internal capacities and external necessities.[13] The external necessities are the challenges and competition that the profession faces, just like other professions, including medicine. They also include the political struggles it wages such as introducing laws and regulations that affect the profession or its members, payments for services, and dealing with fiscal and fiduciary intermediaries. In order to achieve its objectives, it must maximize and leverage its internal capacity to deal with external necessities.

In the past, treatment was justified merely because it was associated with a reputed professional, or it was the tradition, rather than by any evidence. A profession's internal capacity is related to the quality of the professional training and education of its members, its numerical strength, the supports it enjoys from its members, the quality of its leadership, and the resources at the disposal of the professional organization. Viewed through the national lens, the continuing growth, development and relevance of the profession into the future requires that the NSP should strive to improve its internal capacities to be better positioned to deal with the challenges it may face.

Professional growth and relevance in an interconnected world with new challenges in health care therefore require a cadre of appropriately prepared autonomous practitioners with commensurate training.[14] Recent advancements in health care and technology have carved a central role for physiotherapy in the overall health and related quality of life, through the continuum of care at the primary, secondary and tertiary levels, and the prevention and maintenance of good health. Concomitant with this trend is a paradigm shift in the philosophy of physiotherapy practice.[15] The disablement model establishes diagnosis at the system and multi system levels. This model firmly established terminologies such as impairment, functional limitation, and disability as the vocabulary of the profession.

In response to ongoing challenges it is imperative that physiotherapy programmes churn out 'products' that are highly skilled in both the technical and non-technical aspects of the practice, including interpersonal and communication skills. Such 'products' must be capable of providing a high level of service, and must be driven by the prima facie duties that conform to ethical codes such as justice, beneficence, non maleficence, honesty and fidelity.[16] Products of enhanced educational programmes that will turn out autonomous practitioners are of necessity at the doctorate level.[13]

Members' engagement in research is a critical part of the profession's growth to maturity. At present, the journal of the Nigeria Society of Physiotherapy is not published with the consistency and perhaps article quality it deserves. A review of five years' publications (2004-2008) in three international physiotherapy journals revealed no articles from authors based in any institution in Nigeria (table 1). Although it is plausible that other international journals could contain published articles from authors based in Nigeria, much still needs to be done to report experiences in this part of the world.

Table 1. Journal articles publication and contributing authors' countries of institutional affiliation

Journals	USA	CA	UK	AU	NG	AF	Others*	Total
PTJ	548	49	11	27	0	1	119	755
PTP	5	3	48	12	0	1	6	75
AJP	2	3	1	99	0	1	16	122
Total	555	55	60	138	0	3	141	952

*Others includes: Belgium, Brazil, China, Germany, Finland, Hong Kong, Iran, Iraq, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Sweden, Taiwan

CA=Canada; UK= United Kingdom; AU= Australia; NG= Nigeria; AF= Other African countries

PTJ= *Physical Therapy Journal*; PTP= *Physiotherapy*; AJP= *Australian Journal of Physiotherapy*

Leveraging the profession's internal capacities to address external necessities requires leadership commitment, unity, democratic practices, and membership discipline. According to Gladwell,[17]

three agents have been identified as necessary ingredients for creating changes and executing missions. These are the power in a context that emphasizes networking and connection, the law of the few that posits that changes are driven by the efforts of an exceptional few, and the sticking factor which is a well-articulated goal message (figure 1).

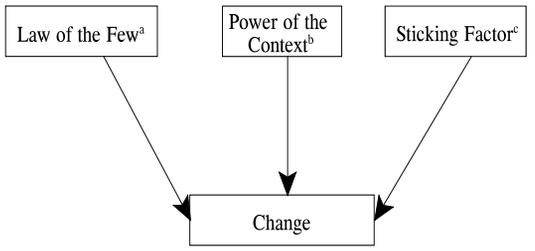

Figure 1. Surmounting external challenges
[a]Law of the Few: Change is driven not by the effort of the majority but by the effort of a handful of exceptional people.
[b]Power of the Context: Emphasizes intra- and inter-professional network and connection.
[c]Sticking Factor: Message conveyed with passion and vigour to facilitate maximal impact.
Source: Gladwell M. *The Tipping Point: How Little Things Can Make a Big Difference*. New York NY: Little, Brown and Company; 2000.

A goal message wrapped up in a mission or vision statement becomes a battle cry for a profession and its members. The Nigeria Society of Physiotherapy should consider developing a vision and programmes that could fashion mission goals that articulate and convey a message with purpose, clarity and passion (see appendix). A mission or vision must inspire members, challenge them to action, and must be one that members would be willing to pursue with vigour and perseverance.

Physiotherapy academic elites should embrace a broad perspective on scholarship,[18] keep abreast of developments in their field, remain professionally active, and expect to be held to the highest standards of integrity in every aspect of their work. Members of the profession must develop clout in their work settings, actively pursue inter-professional collaboration and networking, and remain visible in the communities. The NSP must be willing to assume responsibility for the growth and development of physiotherapy in the West African sub-region.

CONCLUSION

The profession of physiotherapy in Nigeria could be positioned for growth on its way to full maturity by maximizing its internal capacities and leveraging this to engage external necessities and manage challenges, through quality educational programmes that facilitate core professional abilities. The Nigeria Society of Physiotherapy should develop a vision and programmes expressed in mission statements. Society members should strive to gain clout in their work settings, and should seek to register their presence actively in their communities. The future of physiotherapy lies in an enhanced basic, preferably doctorate level education, offering members opportunities for clinical specialization through formalized programmes, including residency.

APPENDIX

Sample Vision and Mission Statement

Vision

In 2020, physiotherapy will be rendered by physiotherapists for the diagnosis, intervention and prevention of impairment, functional limitation and disability, and for the restoration and promotion of well-being and a healthy quality of life. This shall be achieved with enhanced education, practices anchored on evidence, clinical research within and outside of the academic centres, and inter-professional collaboration.

Mission

The mission of our programme is to promote distinguished international physiotherapy education in a challenging and supportive environment which fosters an intricate balance of a theoretical science framework, clinical application, and on-going advancement of physiotherapy knowledge to produce socially responsible providers of service to the whole person and the community.

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