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Challenges Facing Physiotherapy Education in Africa

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ABSTRACT

Health care is changing and the demands put on health professionals are increasing. Physiotherapy education should reflect the health and social priorities of the nation. The World Confederation of Physical Therapy (WCPT) is committed to assisting physiotherapy associations in developing educational standards. Physiotherapy education in Africa however, seems to have a real need for assistance from the WCPT. The aim of this paper is to highlight the challenges facing physiotherapy education in Africa. The Delphi methodology was used to obtain information from key informants involved in the area of physiotherapy education from a variety of African countries. The majority of the participants were people who have experienced physiotherapy education in Africa either as graduates or current teachers. Data were analyzed into themes and sent back to respondents for confirmation. The most important challenges highlighted were: lack of undergraduate training opportunities, limited number of therapists, upgrading of physiotherapy educators, research as a major component of physiotherapy education, and recognition of physiotherapy as an essential service. It is concluded that assistance is needed for physiotherapists from Africa to take their rightful place in the health team and higher education institutions should look at improving diploma qualifications of physiotherapists in African countries.

INTRODUCTION

The culture of health care is changing and the demands put on health professionals are increasing. Changes happen slowly in health care but the changes in education are even slower.¹ However, if these changes are not addressed the clients who receive health care will ultimately suffer. Physiotherapy education has been required to evolve worldwide. Physiotherapy as a profession is currently undergoing changes and it needs to meet the demands of rapidly changing health care services. At a general meeting of the World Confederation for Physical Therapy (WCPT) in 1995, it was recommended that universally education for physiotherapists be a minimum of four years. WCPT, at that time, indicated that they would assist physiotherapy associations to develop appropriate educational standards. An education policy statement for the WCPT adopted at a meeting of the European Region of WCPT in 2004² highlighted the following in physiotherapy education:

- the professional qualification should include a clinical component
- the curriculum should equip physiotherapists to be able to practice in a variety of health care settings
- the curriculum should include evidence-based practice as well as research methodology
- education should be conducted by physiotherapy educators who are able to transfer knowledge and skills thus they
 should have a higher degree or more years of experience i.e. educators should have a Masters degree if training BSc
 graduates.

Physiotherapy education should reflect the health and social priorities of the nation. The primary health care approach in most countries calls for equity of access to health care as a right. If physiotherapy is seen as part of essential health care, then it should be the right of every person to have access to physiotherapy services. Higher education institutions should thus ensure that the links between teaching, research, knowledge transfer and clinical skills exist. In Africa, against the background of an ever increasing HIV/AIDS epidemic, a growing financial burden of an ageing population and rising costs of providing health care

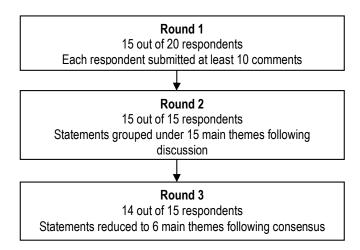
for chronic diseases, the physiotherapy profession faces major challenges. In South Africa the changing role of physiotherapists has been highlighted.³ This changing role is not however, limited and unique to South Africa but to all African countries. This paper aims to highlight the challenges facing physiotherapy education in Africa in attempting to address the needs of the nation.

METHODOLOGY

The Delphi methodology was used to gather relevant information from various African countries. The Delphi method is commonly used to determine and explore group attitudes and needs. An initial open ended research question was formulated; "What do you think are the challenges facing physiotherapy education in your country?" The question was then put to various physiotherapists involved in physiotherapy education as well as graduates from various African countries. Participants were purposively recruited to represent physiotherapy academics currently employed by educational institutions in various African countries and current or recent graduates of physiotherapy degree programs. A snowballing technique was employed where participants were identified within the WCPT Africa list and via Departmental chairpersons of educational institutions. Potential participants were contacted via e-mail. Countries in Africa who currently train physiotherapists include Zambia, Zimbabwe, Kenya, Tanzania, Uganda, Nigeria, Ethiopia, Rwanda and Egypt (Fig 1: areas shaded in white). All responses were sent to a central point which was the university at which the author is based, collated into a list according to frequency of responses and sent back to the respondents for comments. The revised list was categorized into broad themes verified by physiotherapy lecturers at the training institution of the author and the emerging themes or comments were agreed upon before sending to respondents. The respondents were requested to give a yes/no/don't know answer to each comment (e.g. yes I agree that the comment is a challenge for physiotherapy education) and were invited to give a reason for the choices made. Subsequent rounds of the Delphi followed the same process. Iterative rounds continued until at least 85% of the respondents agreed or disagreed with each issue.

RESULTS AND DISCUSSION

All participants responded to all rounds except for one country who did not respond in the last round and two countries did not respond in the penultimate round. Responses were obtained from physiotherapists who trained and are currently training others, working in or have worked in various African countries such as Zambia, Rwanda, Tanzania, Malawi, Sudan, Uganda, Botswana and Kenya. Of the number of participants, 6 were students who were currently upgrading their diploma to a degree but had at least 3 years working experience in an African country, 4 were heads of training institutions and 5 had upgraded their diplomas and were currently physiotherapy educators in their countries. The flow chart below indicates the number of responses and number of respondents for each round.



The challenges highlighted by the respondents are grouped under the following headings: lack of undergraduate training opportunities (physiotherapy schools), limited number of therapists, upgrading of physiotherapy educators, research as a major component of physiotherapy education, resources and funding and recognition of physiotherapy as a necessity and not a luxury in health care. These headings were finally reached by the last round after various comments had been presented

Limited Undergraduate Training Opportunities

Physiotherapy training in Africa varies. As a general rule worldwide, physiotherapy training involves a minimum of four years of tertiary level training. In South Africa the BSc physiotherapy degree consists of four years of general practice training. However, in African countries where physiotherapy training exists, physiotherapists exit their training after three years with a diploma in physiotherapy. These diplomas are not in line with the WCPT guidelines of four year degrees and are thus not internationally

recognized. However, since 1998, countries such as Zambia and more recently Rwanda and Tanzania have moved towards degree programmes. In most cases these countries have only one training institution graduating about 15 physiotherapists per year and this is not enough to meet the needs of the population in the African countries. Countries such as Malawi are dependent on countries such as Tanzania and Zambia for training of therapists. In Malawi they currently have a three year diploma course training rehabilitation technicians who have a limited scope of physiotherapy practice. Lack of highly qualified teaching staff and lack of financial support for the whole process of training contributes to the limited evolution of physiotherapy education in Africa. Figure 1 confirms how few African countries are responsible for training physiotherapists for the entire continent of Africa.

Limited Number of Therapists

The difficulties in realizing the vision of quality physiotherapy education in Africa is hampered by the limited number of therapists. In 2000, it was stated that in developed countries the average physiotherapist to population ratio is 1: 1,400 compared to an estimated 1: 550,000 in developing countries such as Africa.⁴ Related to the few training institutions for physiotherapists in Africa, there is a shortage of physiotherapists in the countries to meet the needs of the people. The limited number of therapists in African countries stems from the lack of training institutions as well as the lack of funds to study in other countries. One example given from Tanzania was:

"Currently the country has approximately 250 physiotherapists and they have to serve a population of approximately 38 million people"

Institutions that train physiotherapists do not train them at the same rate as nurses and doctors. In most rural areas in Africa, the services of physiotherapists are nonexistent. In Ethiopia there are approximately 14 physiotherapists for 60 million people.⁵ The absolute number of physiotherapists in any one country also influences the extent of growth of the physiotherapy profession. The crisis of attrition of physiotherapists also exists in Africa due to lack of government support, family responsibilities and lack of posts. It is evident that physiotherapy provision is insufficient to meet the needs of most African countries. In a document by WCPT in 2003 it was stated that "... service delivery models need to be developed that result in the skills and knowledge of physical therapists meeting the needs of a higher proportion of those in need."⁶



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Research as a Major Component of Physiotherapy Education

The main aim of physiotherapy training over the past century has been to deliver a high quality, intensive teaching curriculum that incorporates clinical supervision in the clinical setting. In Africa, many of the diploma programmes have a small or non-existent research component added to the curriculum. Research has become an important academic cornerstone on which the physiotherapy profession's future rests. If countries have only recently included research into the degree programmes, how many physiotherapy educators are equipped to teach these research methodology modules? This raises the concern that if there is a lack of qualified researching physiotherapy educators, the profession is in trouble as effective management of patients is dependent on research. This is evident in the move towards evidence-based practice. Professions such as physiotherapy have been mandated to base their practice decisions on current evidence which ideally comes from active participation in research and development.⁷ Evidence-based practice is universally recommended as a basis for physiotherapy practice. But if research is not conducted in local settings applicability becomes a concern. In addition to lack of research being conducted specific to local physiotherapy practice, it was also reported that there is not enough research to convince policy makers that physiotherapy is an essential component of the health care team. The limited research that has been conducted has not been translated into a document that is accessible and read by policy makers. The growth in evidence-based practice is essential and the responsibility rests with academics at tertiary institutions to drive the research aspect of the profession.⁸ In Africa, there is an even greater need to drive the quest for evidence based health promotion where larger groups can be reached with less health professionals.

Upgrading of Physiotherapy Educators

The need for physiotherapy educators to question what is being taught and move towards evidence-based practice has been highlighted.⁸ This highlights the need to upgrade physiotherapy educators from diploma level to masters and PhD level if quality education is to be provided in Africa. It appears that physiotherapy has fewer academics holding postgraduate qualifications compared with other health professionals. Upgrading of physiotherapy educators in Africa from diploma level to at least Masters level is a priority if we are to succeed in implementing degree programmes in more African countries. In addition, continuing education for physiotherapists is essential to increase professional standards as well as facilitating educational development.⁵ However, upgrading of educators is linked to the availability of finances and resources. Currently in a country like Sudan, all physiotherapists have been trained outside of the country and the need to upgrade these therapists is not on the public health agenda as the country has just been through the longest civil war in Africa. This is common in other African countries such as Rwanda and Zimbabwe.

Resources and Funding

Quality training at undergraduate level is dependent on adequate resources. The limitation in resources is not only in the form of human resources but also lack of funds and equipment. Adequate equipment for training is one aspect but if research is to guide practice as well as teaching, then both physiotherapy educators as well as physiotherapy students should have access to current literature. Communication with and between African academics is hampered due to lack of internet access, unpredictable power availability and lack of computers especially in rural areas. The need for computers and access to the internet is becoming increasingly necessary for physiotherapists in Africa if they are to keep up with the latest developments in the profession. The ability of a health-care professional to make sound decisions regarding the management of their patients is dependent on actively seeking current and relevant evidence for those decisions by accessing published research.⁷

Lack of funds to upgrade current physiotherapists in African countries is a serious challenge for physiotherapy education. Physiotherapy is seen as a profession with relatively less importance in health and development compared to doctors and nurses. In countries such as Rwanda, following the genocide, spending money on upgrading rehabilitation therapists, ironically, is definitely not regarded as a priority.

Physiotherapy as an Essential Service

Physiotherapy should play an essential role in the health care system as part of the health care team. It is concerned with the promotion of health and well being of individuals as well as the curative, rehabilitation and prevention of various disorders. In most developed countries, physiotherapy has obtained the recognition it deserves although the debate around first contact practitioner status still continues. In Africa, however, physiotherapy is still institution based with very little community based physiotherapy. Thus there is lack of access to physiotherapy services for a large part of the population. Physiotherapy should play a major role in acute care and rehabilitation of their clients and promotion of health in communities.⁵ However, this information should be effectively translated to key stakeholders such as doctors, medical superintendents and policy makers. This can only be achieved if physiotherapists are able to show the effectiveness of their interventions and the contribution it makes to the health and well being of society.

CONCLUSION

From the current study the challenges facing physiotherapy education in Africa have been short listed to six main points. More than 10 years ago, WCPT, indicated that they would assist physiotherapy associations in establishing good quality physiotherapy training programmes though the form this assistance would take was and remains unclear. Currently African countries are still struggling to upgrade their diploma programmes to degree programmes. One obvious and practical form such assistance could take would be for WCPT to provide financial assistance to African physiotherapists pursuing opportunities either within Africa or internationally to upgrade their professional qualifications. For professions to be visible at the level to influence policy makers, the physiotherapy associations in the various countries need to be politically active and vocal. WCPT Africa needs to highlight the urgent need for assistance in the upgrading of therapists when reporting to WCPT and encourage institutions that have degree programmes to assist in upgrading therapists. This is important in countries training physiotherapists because if the government does not create posts, physiotherapy will be seen as redundant and only serving the elite and training institutions will not receive applicants. If WCPT and WCPT Africa makes the upgrading of therapists in countries offering diploma courses a priority it would assist

- 1: providing therapists with the research component of physiotherapy education that they currently lack and thus meaningful research can be conducted in their countries
- 2: upgraded therapists being able to provide leadership in upgrading their current programmes to degree programmes as they would have the necessary qualifications
- 3: providing a valuable skill to the physiotherapy profession and these therapists can assist in the training of others.

However, it would be incorrect to overlook the strides made in African countries that over the past decade have attempted to improve the qualifications of their physiotherapy educators with limited resources and limited funding.

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REFERENCES

- 1. Nicholls D, Larmer P. Possible futures for physiotherapy: an exploration of the New Zealand context. *New Zealand Journal of Physiotherapy*. 2005; 33(2): 55-60.
- 2. European Region of World Confederation of Physical Therapy. Education Policy Document. 2004; 1-30.
- 3. Mbambo N. The changing role of physiotherapy in South Africa. South African Journal of Physiotherapy. 2005; 61(3): 2-6
- 4. Twible R, Henley E. Preparing occupational therapists and physiotherapists for community based rehabilitation. *Asia Pacific Disability Rehabilitation Journal: Selected Readings in CBR Series 1: CBR in Transition.* 2000, 109-126.
- 5. Higgs J, Refshauge K, Ellis E. Portrait of the physiotherapy profession. *Journal of Interprofessional Care*. 2001; 15(1): 79-89.
- 6. World Confederation of Physical Therapy. Primary Health care and Community Based Rehabilitation, *WCPT Briefing Paper*. 2003, 1: 1-33.
- 7. Plant R, Lossing-Rangecroft C. Regional research and development network supporting professions allied to medicine. *British Journal of Clinical Medicine*. 2001; 6(3): 190-196.
- 8. Mercer S, Jones D. Physiotherapists in a university environment: the challenge to the profession. *New Zealand Journal of Physiotherapy*. 2002; 30(3): 18-21.