POSITION PAPER: THE ESSENTIAL ROLE OF PHYSIOTHERAPISTS IN PROVIDING REHABILITATION SERVICES TO PEOPLE LIVING WITH HIV IN SOUTH AFRICA

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ABSTRACT: *Despite increased access to highly active anti-retroviral therapy (HAART) in South Africa, there remains a high risk of people living with HIV (PLHIV) developing a wide range of disabilities. Physiotherapists are trained to rehabilitate individuals with the disabilities related to HIV. Not only can South African physiotherapists play a significant role in improving the lives of PLHIV, but by responding proactively to the HIV epidemic they can reinforce the relevance and value of the profession in this country at a time when many newly qualified therapists are unable to secure employment. This paper offers recommendations that may help to fuel this response. These ideas include enhancing HIV curricula at a tertiary level, designing and attending continuing education courses on HIV and researching Southern African rehabilitation interventions for HIV at all levels of practice. Furthermore, it is vital that physiotherapists are at the forefront of directing multi-disciplinary responses to the rehabilitation of PLHIV in order to influence stakeholders who are responsible for health policy formulation. It is hoped that this paper stimulates discussion and further ideas amongst physiotherapists and other health professionals in order to improve the quality and access to care available to PLHIV in South Africa.*

KEY WORDS: *HIV, PHYSIOTHERAPY, REHABILITATION, RESEARCH, RESPONSE.*

Sub-Saharan Africa bears an inordinate share of the worldwide HIV burden, with an estimated 11.3 million people living with HIV (PLHIV) in 2009 (UNAIDS 2010). AIDS-related deaths have fallen in this region from 1.4 million in 2001 to 1.3 million in 2009 and this trend looks set to continue with the more widespread availability and uptake of highly active anti-retroviral therapy (HAART) (UNAIDS 2010). The statistics above tell a story. Ultimately there will be more and more people living with HIV and consequently far more people living with disabilities as a result of their HIV infection (Myezwa et al, 2011, Nixon 2011). Physiotherapy as a profession can play a key role in assisting PLHIV manage these disabilities and improve their holistic participation in the occupational, social and recreational aspects of their lives.

The changing nature of the local HIV epidemic coincides with an important time in the evolution of the profession of physiotherapy in South Africa. The occupational specific dispensation (OSD) negotiations for physiotherapy were completed in 2010, and resulted in salary increases for public sector physiotherapists; primarily at Grade 1 level (NPSWU, 2010). Despite this development, many qualified physiotherapists perceive that the profession remains undervalued, both in a remunerative sense and in terms of an understanding of what physiotherapists actually do as first line practitioners (SASP, 2009). This is highlighted by the shortage of physiotherapy posts at a number of state institutions and the difficulty facing some newly-qualified physiotherapists in securing employment following their year of community service. Despite these job shortages, the number of physiotherapists being trained at South African tertiary institutions continues to increase, in line with specific government directives to train

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more health professionals (DOH, 2011). For example, the annual first year intake at the physiotherapy department at the University of KwaZulu-Natal (UKZN) has increased from approximately 30 students to more than 50 students in the past decade.

The demand for any medical service, such as physiotherapy, is determined by a country's burden of disease. It is to be noted that the disease burden is described by Disability Adjusted Life Years (DALYs), a composite measure which incorporates both the number of years lost to mortality and the number of years lived with disability (Murray, 1996). According to the proposed National Health Insurance (NHI), South Africa faces a quadruple burden of disease, with the mortality and morbidity related to HIV/AIDS second only to non-communicable diseases, resulting in this country having a burden of disease almost double that of other developing countries (Econex, 2009). A correct analysis of this burden of disease is crucial in the allocation of resources and the forecasting of demand for specific medical services. In April 2012, the Department of Health began piloting the NHI in 10 selected districts (DOH, 2012).

In order to enhance the relevance and value of the profession, South African physiotherapists working in all sectors need to respond proactively and energetically to the HIV epidemic (Myezwa and Stewart 2012, Nixon 2011). This is particularly important in ensuring that physiotherapy is not forgotten when any revised resource allocation occurs under the NHI. This task should not be borne solely by state physiotherapists, but should be supported by physiotherapists working in the private sector as well as in tertiary education, all of whom stand to benefit from an increased understanding of the abilities and skills of physiotherapists. Furthermore, it is important that physiotherapists work closely with other allied health professionals, such as occupational therapists and speech therapists, in achieving these goals. Interdisciplinary teams of healthcare professionals involved in rehabilitation can offer a range of rehabilitative services through a comprehensive, coordinated and collaborated programme (Jelsma et al, 2002).

As experts in exercise, physiotherapists are ideally placed to offer services to PLHIV, via the development of well-planned and progressive rehabilitation and exercise programmes. While physiotherapists may be well aware of this, it was encouraging to note that a recent newspaper article in a national publication (Malan, 2012) outlined the crucial role physiotherapists and other health care professionals play in the function and well-being of PLHIV, while at the same time highlighting the fact that this role is often not acknowledged. The effects of exercise on the physical and mental well-being of PLHIV have been explored in a number of studies, many of which have been conducted in the high income countries. These studies are well summarised in two systematic reviews by O'Brien et al (2009 and 2010) on the effects of resistance exercise and aerobic exercise interventions on PLHIV. The conclusions were that there were positive effects of exercise including improvements in cardiopulmonary fitness, muscle strength and certain measures of psychological status as well as increases in body weight. Both forms of exercise were further found to be safe for PLHIV, incurring no additional health risks to participants. Overall, no significant changes in immunological status (as evidenced by CD4 count and viral load) were noted. Similarly, in a low income East African context, Mutimura (2008) found that exercise does not negatively affect CD4 count and improved several components of quality of life, body fat distribution and metabolic indices, which may in turn have positive effects on HAART adherence and other treatment initiatives. More research, however, is required regarding the physiological and psychological effects of exercise and therapy on PLHIV in a relatively under-funded Southern African public sector context.

South Africa has taken a leading role in producing research pertaining to the rehabilitation of PLHIV and disability. Myezwa et al (2009) conducted a study to assess eighty HIV in-patients at the Chris Hani Baragwanath Hospital in Gauteng province, South Africa. Using the ICF checklist (WHO, 2003) to assess the impairments, activity limitations and participation restrictions experienced by these patients, the researchers found that over 70% of the participants in this study reported impairments related to digestive, neuromuscular, respiratory and sensory function as well as emotional and mental problems and decreased energy levels and sleep quality. These impairments led to activity limitations such as reduced mobility and problems with self-care as well as participation restrictions, including the ability to engage fully in community, social and civil life. Other physiotherapist-led studies found similar impairments to be present in contrasting settings (Jelsma et al, 2006, Van As et al, 2008, Myezwa 2011). Ferguson and Jelsma (2009) and Potterton et al (2010) highlighted the motor and cognitive developmental challenges facing HIV infected children and the positive influence of a home stimulation programme.

Other disciplines have also revealed data showing that impairments such as HIV dementia (Joska 2010, Lawler 2010, Lawler 2011) neuropathy (Maritz 2010), depression and anxiety (Brandt 2009, Freeman 2007), changes in body function such as pain (Friend-du Preez et al, 2010, Nair and Muthukrishna 2009), fatigue (Nair and Muthukrishna 2009, Gerntholtz et al, 2006), emotional challenges, sensory problems (Maritz 2010) as well as activity problems particular in the area of mobility (Nair and Muthukrishna 2009, Patel 2009) and self-care (Oketch 2011) are prevalent in a significant amount of people living with HIV (many of whom have access to treatment). Not only do these studies reveal the myriad of problems that PLHIV face, but they further underscore the urgent need for increased therapy resources in the area of HIV management.

Physiotherapy as a profession can play a major role in improving both the health and quality of lives of PLHIV. Here, we offer recommendations on the way forward and hope to encourage discussion about possible solutions to enhance future rehabilitation interventions for PLHIV.

PHYSIOTHERAPY TRAINING PROGRAMMES TO ENHANCE HIV CURRICULA:

An audit of physiotherapy curricula in South African universities (Myezwa, 2008) revealed many gaps in the teaching of HIV-related material to physiotherapy students. It is therefore necessary that these tertiary institutions examine their curricula to ensure that relevant and up-to-date teaching on HIV is included. Ideally, academics from the various training institutions could collaborate in the design and development of a comprehensive curriculum (Myezwa and Stewart, 2012). In an effort towards realising this goal, a survey of 58 physiotherapy academic staff at eight South African universities was recently conducted (Myezwa et al, 2012). This survey found a high level of consensus (above 80 percent) amongst these academics as to which HIV-related topics should be taught in their individual programmes. These topics included HIV pathophysiology, anti-retroviral therapy, HIV-related disorders and teaching on HIV and disability. This theoretical grounding should be reinforced and developed by ensuring that students have frequent opportunities to treat and rehabilitate PLHIV during their clinical placements. The challenge now for individual institutions is to ensure that these topics are mainstreamed into their curricula.

CONTINUING EDUCATION ON HIV FOR ALL PRACTICING PHYSIOTHERAPISTS:

Secondly, private and public sector physiotherapists should be encouraged to attend seminars or workshops on topics pertinent to the physiotherapy management of HIV. This would enable physiotherapists interested in this clinical area to update their knowledge in this ever-evolving field. It might even be suggested that, just as resuscitation and ethics CPD points are required for reregistration with the HPSCA, a course in HIV should be included as an additional requirement. In order to both highlight the value that physiotherapists as a profession can offer as well as encourage multi-disciplinary collaboration, it would be opportune to invite other health care professionals to these training events. An example of such a workshop is currently being piloted by a collaboration between the Health Economics and HIV/AIDS Research Division (HEARD) and the UKZN. (HEARD, 2012). The material for the workshop will be available in 2013.

MORE RESEARCH IS REQUIRED ON REHABILITATION IN THE CONTEXT OF HIV IN SOUTH AFRICA:

Thirdly, there is a dearth of evidence for interventions in HIV within a Southern African context and it would be prudent for the profession to accelerate and facilitate the production of evidence to inform physiotherapy practice and education, and to contribute to HIV policy. A pilot study conducted recently by HEARD (Hanass-Hancock et al, 2012) indicates that HIV-related disability might not only influence adherence but might also be closely linked to issues around mental health and coping. Research should also explore the role of rehabilitation, and physiotherapy specifically, in improving adherence to ART and other aspects so crucial to the HIV epidemic.

PHYSIOTHERAPISTS NEED TO BE PROACTIVE IN CLINICAL CARE:

Fourthly, it is important that physiotherapists take an active leadership role in initiating and directing multi-disciplinary responses to the rehabilitation of PLHIV, rather than wait patiently for referrals which may never appear (Myezwa et al, 2009). This proactive approach needs to be taken with an understanding of the South African Department of Health (DOH) vision of public health care delivery in South Africa moving towards community-based care (CBR) and home-based care (HBC) models. In addition the first line practitioner status that physiotherapists enjoy should encourage an approach to screen assess and treat relevant problems among HIV patients. According to the South African Department of Health, (DOH 2001) these models promote the treatment of people in or near their homes and encourage participation by people, responds to the needs of people, encourages traditional community life and creates responsibilities.

PHYSIOTHERAPISTS SHOULD BE AT THE HIV DECISION-MAKING TABLE:

Finally, in the longer term, it is crucial that in the interests of the profession, all physiotherapists are involved in demonstrating the value that they can add in both the public and private sectors to stakeholders who are responsible for policy formulation and decision-making. This is obviously not limited to PLHIV but in an ever-competitive resource-poor South African context, physiotherapy should ensure that they are in the vanguard of the response to HIV-related disability and impairments. In order for our profession to grow and thrive it is not good enough for physiotherapists to merely know what they themselves can do, it is vital that they let others at all levels of health delivery know of the positive impact they can have on PLHIV.

To conclude, physiotherapists should be key role players in providing rehabilitation to PLHIV in the era of HAART. The need for rehabilitation services will increase as PLHIV live longer lives. The onus lies on all physiotherapists to seize this opportunity to promote the critical role that the profession should be playing in response to the HIV epidemic in this country. With improved training and research in this area, proactive clinical intervention and the building of collaborative relationships with other health professionals, physiotherapists can add significant value to the lives of PLHIV, while at the same time strengthening the standing of the profession in South Africa.

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