

# PHYSIOTHERAPY IN THE MANAGEMENT OF NON-COMMUNICABLE DISEASES: FACING THE CHALLENGE

**ABSTRACT:** *There is mounting evidence of the rising incidence and prevalence of non-communicable diseases in developing countries. Governments are facing serious challenges in health care due to the rising trends in non-communicable diseases as a result of demographic and epidemiological changes, as well as economic globalization. Cardiovascular disease, cancers, diabetes, respiratory disease, obesity and other non-communicable conditions now account for 59 percent of the 56.5 million global deaths annually, and almost half, or 46 percent, of the global burden of disease. It is estimated that by 2020, non-communicable diseases will account for 60% of the global burden of disease. The burden of non-communicable diseases in sub-Saharan Africa is already substantial, and patients with these conditions make significant demands on health resources. How do these changes affect physiotherapists? This paper aims to highlight the need for physiotherapists to shift their focus from curative to preventive care in order to face the challenge of non-communicable diseases.*

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## INTRODUCTION

For centuries infectious diseases such as malaria, tuberculosis and cholera were the main causes of death worldwide and any advances against infection have been reversed by the rise of the HIV-related disorders (Alberti 2001). Against this gloomy background, non-communicable diseases (e.g. cancer, cardiovascular disease, diabetes) are emerging as major problems as well. Disease rates from these non-communicable conditions are accelerating globally, advancing across regions and social classes. The majority of the chronic disease problems are currently also occurring in developing countries such as South Africa. The question that arises is whether physiotherapists are prepared to face this new challenge. This paper aims to identify the role of physiotherapy in the management of the non-communicable disease rise in South Africa.

## BURDEN OF NON-COMMUNICABLE DISEASES

Governments are facing serious challenges in health care due to the rising trends in non-communicable diseases as a result of demographic and epidemiological changes, as well as economic globalization (Puska 2003). The World Health Report (2001) estimated that non-communicable diseases accounted for 60% of global mortality and 43% of the global burden of disease in 1999. The top worldwide "killer" diseases are cardiovascular disease, cancer, cerebrovascular disease, chronic obstructive pulmonary disease, diabetes, HIV/AIDS and malaria.

The World Health Report (2002) identifies five out of the ten leading global disease burden risk factors as high blood pressure, high cholesterol, obesity, physical inactivity and unhealthy diet. Together with alcohol and tobacco use, these preventable risks play a key role in the development of chronic diseases (WHO 2003). The burden of non-communicable diseases in sub-Saharan Africa is already substantial, and patients with these conditions make significant demands on health resources (Unwin et al 2001). In addition this burden of disease is likely to increase hugely over the coming decades. Epidemiological data from two

African countries indicate that the prevalence of non-communicable diseases such as diabetes and hypertension have increased tremendously over the past 5 years (Edwards et al 2000, Fourie and Steyn 1995). Based on the current trends, by the year 2020 non-communicable diseases are expected to account for 73% of deaths and 60% of the global burden of disease (World Health Report 2001). Risk factors for many of the non-communicable diseases are preventable and challenge health professionals to become involved in the monitoring of these emerging health issues in order to implement successful health promotion programs. Are we as physiotherapists adequately prepared to tackle the double burden of communicable and non-communicable diseases?

## MANAGING NON-COMMUNICABLE DISEASES IN SOUTH AFRICA

In South Africa patterns of disease are exacerbated by an exploding epidemic of HIV/AIDS. This places a high demand on health services undergoing transformation in the face of shrinking budgets and other demands (Medical Research Council 2001). The consequences of these competing priorities are that there is little recognition of the magnitude of the burden of non-commu-

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nicable diseases in South Africa. The Medical Research Council report further states that in South Africa 56% of the population has at least one risk factor for non-communicable diseases, which includes hypertension and diabetes (Medical Research Council 2001). Clearly these risk factors require lifestyle changes and medical care to reduce the projected burden of disease.

There is strong scientific evidence suggesting that a change in dietary habits and physical activity can powerfully influence several of the risk factors in populations (Surgeon General Report 1996). Recognizing this, formulated a Global Strategy on Diet, Physical Activity and Health (WHO 2002a). This strategy will become the backbone for the World Health Organization in promoting global changes towards healthier diets and increased physical activity, to prevent chronic diseases and promote population health. As physical activity is a common denominator in many of the chronic diseases of lifestyle it has become evident that in promoting physical activity it can have enormous economic benefits in terms of health care costs, increased productivity, as well as healthier physical and social environments.

Within the current health care system in South Africa, which focuses on primary health care, there has been a shift from tertiary level hospitals to primary care hospitals. Within this primary health care package for South Africa, a set of norms have been set around chronic diseases (hypertension, type2 diabetes, stroke, etc.) which includes assessing patient satisfaction and quality of care regularly and evaluating community involvement as well as reducing the evidence of obesity within our communities and patient education (PHC 2000).

#### THE ROLE OF PHYSIOTHERAPY

How do these changes affect physiotherapists? Physiotherapy is both a curative and preventive discipline and forms an integral part of the health care system in South Africa. Physiotherapy employs a holistic approach to health care in which all the health needs of patients can be addressed. This means that the

physiotherapist considers areas such as lifestyle, work and leisure and helps the patient to self-manage their condition. Swilling (1997) highlighted the need for physiotherapists to shift from the current form of professional service to involvement in primary health care, which embraces health promotion and disease prevention.

Thus how are physiotherapists dealing with this epidemic of non-communicable diseases? Van Rooijen and van der Spuy (2000) highlighted the need for physiotherapists to revisit their role of service delivery in South Africa. As physiotherapists our focus should be on prevention and not treatment. Included in prevention would be our focus on health promotion. Most non-communicable diseases are largely preventable by lifestyle changes including behavioral changes, accepting responsibility for your health and adopting a healthy lifestyle. Patients taking responsibility for their own health can influence the risk factors of non-communicable diseases (Eales and Stewart 2001). These authors further highlight that we need to realize that some of the barriers to the assumption of self-responsibility for health care in South Africa are factors such as lack of knowledge and cultural differences.

In addition, adopting a physically active lifestyle can also influence the risk factors of non-communicable diseases. The importance of exercise in managing diabetes is well documented (Van Rooijen et al 2002; Odebeyi and Ohwovoriole 2002). Physical activity is one of the cornerstones of a healthy lifestyle and one of the core skills used by physiotherapists is therapeutic exercise. Regular physical activity/exercise benefits many aspects of health. As public health professionals physiotherapists can make the public aware of modifying health behaviors to include physical activity (Stewart and Eales 2002). However, personal and environmental barriers should be taken into cognizance as these may contribute to non-adherence to physical activity promotion programs (Van Rooijen et al 2002).

#### CONCLUSION

There is a global shift of health care from curative to preventive management. The Ottawa Charter states that "health promotion includes building healthy public policy, creating supportive environments, strengthening community action, developing personal skills and reorienting health services" (WHO 2002b). In order to adequately address the challenging issues of non-communicable diseases that is pertinent to groups, communities and societies, we need to shift our paradigm from curative services to preventive services. By promoting lifestyle changes with an emphasis on physical activity, physiotherapists can make a major cost-effective contribution to the prevention, control and management of non-communicable diseases.

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Provision of triple therapy to the public was obviously not a decision to be taken lightly. Poorly planned roll-out of ARVs could result in a major national resource - cheap, generic, effective ARVs - being squandered as compliance is not monitored and drug resistance builds up. It is sobering to think that the cure rate for tuberculosis is only 50-60% and this is a disease that can be cured with a relatively short period six months of drug therapy. The South African Government committed itself to providing ARV to 56 000 of the estimated 500 000 people living with HIV/AIDS in need of the drugs by the end of 2004. For many reasons the target was not met and only 27000 were receiving ARV treatment by this time. The issues are so complex, the magnitude of the problem is so great and the urgency is so pressing that all parties need to meet and plan a co-ordinated response to the epidemic.

South African physiotherapists have to respond to this disastrous epidemic and, as

the magnitude of the problem is so much smaller in the North, we cannot be guided only by literature emanating from the established market economies. We must develop our own strategies, try them, test them and share the results. The people of South Africa need our unique understanding of functional deficits, our problem solving skills, our caring and our commitment to engage with this disease as never before.

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