

## BARRIERS TO UTILISATION OF PHYSIOTHERAPY SERVICES AMONG THE ELDERLY IN THE LIVINGSTONE DISTRICT, ZAMBIA

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### Abstract

**Aim:** The purpose of this study was to identify the barriers to utilisation of physiotherapy services among elderly people in Zambia.

**Methods:** By means of a convenience sampling technique, 200 elderly people, both males and females aged 60 years and above, were recruited from the Livingstone District in Zambia. A structured questionnaire, developed from literature, was used for collecting data. The Excel software programme and Statistical Package for Social Science (SPSS) were used for the capturing and analyses of the data, using descriptive and inferential statistical analyses.

**Results:** The factors that influenced the utilization of physiotherapy services by the participants were: non-referral to the service, long distances, transport, unavailability of the service in the communities and lack of awareness of physiotherapy. Income was significantly associated ( $p < 0.05$ ) with their inability to go for physiotherapy services.

**Discussion:** The results of this study show that physiotherapy services are not meeting the needs of the elderly in the Livingstone District in Zambia there is a need for the physiotherapy profession to raise awareness of their role in the elderly and become promoters of healthy and active aging by providing services at primary health care level through out-reach programmes.

**Conclusion:** Well-coordinated health services that integrate social, economical and physical services for the elderly in the district are recommended in order to achieve active and healthy ageing.

### Introduction

One of the main features of the world population within the next few decades will be the rapid increase in the absolute and relative numbers of older people in both developing and developed countries (Kalache & Keller, 2000; WHO, 1998). Similarly, the number of older persons in Zambia is expected to rise from 216 196 in 1999 to 1 452 706 by 2050. In Africa the increase is partly due to a decline in birth rates, an increase in life

expectancy, improved health care provision and a moderate decline in mortality rates (Amosun 1999; Simelela 2001; Tembo & Sibanda, 2001). In this context of population ageing health services are expected to meet the health needs of the elderly in order to ensure healthy and active ageing (WHO, 2002)

It has been reported in earlier studies that various factors influence the utilisation of medical services. A survey carried out in Nigeria revealed

that inadequate utilisation of health services was due to the unavailability, inaccessibility and the costs of health facilities catering for the elderly in the rural areas (Oshomuwe, 1990). The study also revealed that low income and long waiting periods before being attended to by health professionals were contributing factors. For these reasons there was shift towards traditional medicine, which is inexpensive and culturally accepted. A similar study in Zimbabwe revealed that the medical aid schemes do not cover the elderly and physiotherapy services (Amosun, Mazarire & Mawere 1995). Allain, Wilson, Gomo, Mushangi, Senzanje, Adamchak, & Matenga (1997) reported on a study conducted in Zimbabwe and found that age was a limiting factor in the utilisation of health services. Also no home visits were being done for those who are unable to access the health centres.

Amosun (2001) argues that an understanding of the health needs of the current generation of older persons in Africa is essential if appropriate interventions are to be provided. According to Jaswal, Vandervoort, Speechley, Helewa and Hey (1997), with the predominance of disability in the elderly, one can expect that geriatric care will become a leading area in physiotherapy practice. However, information on the use of physiotherapy services by older persons in Africa, particularly in Zambia, is lacking (Amosun, 2001). Thus the purpose of this article is to highlight the barriers to the utilisation of physiotherapy services among the elderly in the Livingstone District in Zambia. According to the World Health Organisation (WHO) Policy Framework on Active Ageing (2002) it is essential for health service providers and other stakeholders to ensure that the elderly benefit from services. This is particularly important when one considers the impact of HIV/AIDS on communities where the older person

is left to care for the orphans of their deceased family members (HelpAge International, 2004). It is thus imperative that the elderly sector of society remains active and healthy for as long possible (WHO, 2002).

## **Methodology**

The study was carried out in the Livingstone District in the Southern Province of Zambia, which has an estimated population of 1,500 urban elderly people. A cross-sectional study design utilizing a quantitative research method was chosen for the study. A convenience sampling technique was used to recruit 200 men and women, aged 60 years and above to participate in the study. The purpose of the study was explained to the participants and they were assured of confidentiality and anonymity of their responses. A structured, self-administered questionnaire with pre-coded and closed-ended questions was used to identify the barriers to utilization of physiotherapy services. In addition the questionnaire determined their awareness of physiotherapy services, as well as their knowledge of the benefits of physiotherapy for the elderly. The questionnaire was adapted and modified using existing literature of Oshomuvwe (1990), Cheonga (2001), Ahn and Kim (2004). A pilot study was carried out using 10 subjects from the waiting rooms of the Livingstone General Hospital prior to the main study in order to establish content validity of the modified questionnaire. The original questionnaire was designed in English and translated by a professional translator into Tonga, the local language spoken in the Livingstone District. Thereafter a different independent translator translated the Tonga version back to English in order to ensure that the translated version had the same meaning as the original English questions. The nominal data were numerically coded and

captured into the Excel and SPSS version 12.0 software programs. The Chi-squared test was used to statistically determine associations between barriers and utilisation of the service. The p-value was determined at 0.05.

## Results

A total number of 200 elderly people with a mean age of 72.37 years participated in the study. The socio-demographic data of participants are reflected in Table 1.

**Table 1. Socio-demographic data of participants**

Variables	Characteristics	Number	(%)
<b>Gender</b>	Male	107	(53.3)
	Female	93	(46.6)
<b>Age</b>	60 – 70 years	99	(49.5)
	71 – 80 years	68	(34)
	81 – 90 years	28	(14)
	> 90 years	5	(2.5)
<b>Employment</b>	Employed	22	(11.0)
	Retired	52	(26.0)
	Unemployed	109	(54)
	Self-employed	17	(8.5)
<b>Education</b>	No schooling	67	(33.5)
	Primary	71	(35.5)
	Secondary	36	(18)
	Post secondary	13	(6.5)
	Tertiary	13	(6.5)
<b>Income</b> K <sup>1</sup> per month	No income	159	(79.0)
	Less than K 500,000	32	(16.0)
	K500, 000-K900, 000	5	(2.5)
	K900, 000-K1.3 million	3	(1.5)
	More than K1.3 million	1	(0.5)

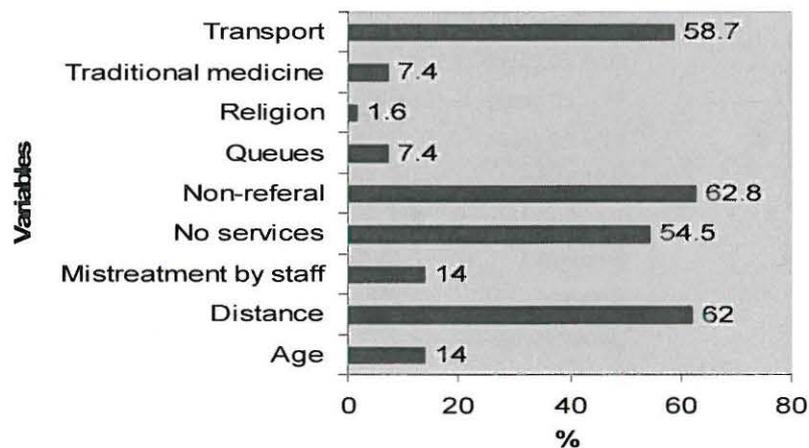
<sup>1</sup> Kwacha: 1 (US)\$ = Zm K 5000.00

**Barriers to Utilisation**

The study identified that the majority of the elderly (61%) were not able to make use of the physiotherapy services. In the Livingstone District in Zambia various barriers to the utilisation of physiotherapy services were identified (Fig. 1). The predominant barriers stated by the respondents were non-referral to the service

(62.8%), distance (62%), transport (58.7%) and no services (54.5%). In addition to these barriers the inferential statistical analyses identified significant associations ( $p < 0.05$ ) between other factors such as the participants' knowledge and awareness of physiotherapy, their level of education and the utilization of the service.

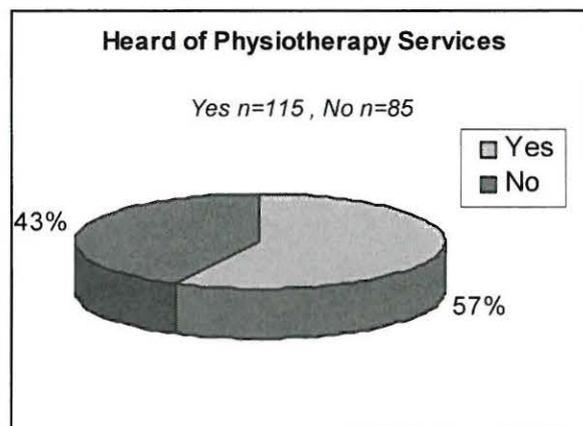
**Figure 1. Barriers to Utilization of Physiotherapy Services (N=121)**



The results showed that 42.5% (n=85) of the elderly in the study indicated that they had never heard about physiotherapy before (Fig.2). Furthermore, a significant association ( $p=0.000$ ) was found between the participants' level of

education and awareness of physiotherapy. Thus, those with lower levels of education were less likely to use the service because of their lack of awareness thereof.

**Figure 2. Awareness of physiotherapy services n =200**



## Discussion

One of the reasons why elderly people in this study did not use the physiotherapy services was because they were not being referred to the service. This should be of great concern to physiotherapists as it is usually the standard practice for doctors or clinical officers, who are the first contact practitioners, to refer patients who attend public hospitals in Zambia to other services such as physiotherapy. Thus it seems that the patient referral system is not effectively being utilized by health professionals in Zambia. This is in contrast to the Netherlands where 70% of the patients with mobility impairment were referred for physiotherapy services by Primary Care Physicians (Hendriks et al, 2003). Non-referral of patients for physiotherapy could partly be due to the lack of awareness of the roles of physiotherapists. This is compounded further by the participants' poor awareness of physiotherapy and its benefits to the elderly.

Inaccessibility of the service due to distance was identified as another problem in seeking physiotherapy services. The physiotherapy service is only found at the hospital that has to cover an area of 282 square kilometres for the urban community and 1145 square kilometres for the rural community. This means that the elderly have to walk long distances to receive physiotherapy services. There are also no out-reach physiotherapy services at the clinics in the district to cater for the elderly in the communities. It is argued that physiotherapy services should comply with

the Primary Health Care principles of accessibility and affordability.

Linked to distance as a barrier, is transport as indicated by 58.7% of the participants. Thus, they have to meet extra transport costs despite the majority having no income. This finding correlates with a study by Fitzpatrick, Powe, Cooper, Ives and Robbins (2004) in the USA where the elderly indicated transport as the most common barrier for them to access the hospitals. Similarly, Darkwa (1999) and Oshomuvwe (1990) argue that elderly people who travel from rural areas to the cities to seek medical care incur added transport costs. Such costs and inconveniences caused by long, exhaustive journeys and poor road networks in the Livingstone District could be avoided if physiotherapy services are extended beyond the confines of hospitals in order to benefit the elderly in their communities.

Unavailability of services was stated by more than half (54.5%) of the participants who were not able to make use of physiotherapy services. This finding is supported by Oshomuvwe (1990) who states that inadequate utilisation of the health services is due to unavailability of the facilities and services for the elderly population. It therefore seems as if accessibility to health services still remains a problem in spite of the Zambian government's policy of free health services for the elderly aged 65 years and above (Central Statistics Office, 2000). The problem of unavailability of services could

be attributed partly due to a lack of involvement of the physiotherapists through community out-reach programs for the elderly in the district, compounded by the shortage of physiotherapists in the country.

In this study, the lack of awareness of physiotherapy among 43% of the participants may have influenced the utilisation of the service by the elderly in this district. The result correlates with a study by Ahmed, Lemkau, Nealeigh and Mann (2001) who found that lack of information on the availability of free or reduced cost medical services in the USA was the biggest barrier to utilisation the health services. In contrast, Cheonga (2001) demonstrated that the elderly participants in a study in Malawi had good knowledge about the physiotherapy services for the elderly. This lack of awareness of the physiotherapy services in Zambia could also be as a result of the small number of physiotherapists working in the entire country resulting in limited exposure of the profession to the Zambian people. Currently, there are only 91 physiotherapists practising in both private and public hospitals in this country (Nankwanga, Struthers & Rhoda (2004). In the Livingstone District where this study was conducted there were only 5 practising physiotherapists serving a population of 150,000 people at the time of the study (Personal communication with official from Provincial Office, 14/01/05). Other factors such as level of education and knowledge of physiotherapy were also

significantly associated with utilisation of the service.

Furthermore, the study demonstrated, to a lesser extent, other barriers to the utilisation of physiotherapy services among the elderly people. One of these barriers is ill-treatment by staff. A study by Ahmed, Kraft and Porter (1986) also identified poor attitudes of professionals towards geriatric patients. Spier (1992) advocates that the curriculum for health professionals should include gerontological issues in order to develop positive attitudes towards the elderly. Other barriers to the utilisation of physiotherapy services were age, long queues, religion and alternatives such as the use of traditional medicines. However, earlier studies found long waiting hours, poor infrastructure, high medical bills and work as barriers to utilisation of the health care in general (Amosun et al, 1995; Oshomuvwe, 1990; Allain et al, 1997; Morreale, 1998).

## **Conclusion**

The finding of this study suggests that the barriers to utilisation of physiotherapy services by the elderly indicate that the services do not conform to the principles of Primary Health Care in terms of accessibility, affordability, availability, illness prevention and health promotion. Another barrier identified in the study namely, non-referral, implies the need for improving interdisciplinary teamwork. The referral system can only improve if the various health professionals know the roles of each discipline.

Thus, there is need for physiotherapists to join other professionals and the private sector in developing interdisciplinary health promotion programmes to enhance active and healthy aging in the country through community out-reach and to educate the elderly about the benefits of attending physiotherapy services. This will be in accordance with UN (1999) policy recommendations for older people to have access to health care and help them maintain or regain the optimum level of physical, mental and emotional well-being and prevent or delay the onset of illness. The only challenge remaining is to enact these policies that have been in existence for a very long time.

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