Research Article

Physiotherapy Services Required at Primary Health Care Level in Gauteng and Limpopo Provinces (Service Provider's Perspective - Physiotherapists/Assistants)

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ABSTRACT: *This study was conducted to determine the opinion of physiotherapists and physiotherapy assistants with regards to physiotherapy services required at a Primary Health Care (PHC) level in two provinces of South Africa, one being urban (Gauteng) and the other one more rural (Limpopo).*

Using a descriptive study design, a sample consisting of 728 physiotherapists and assistants was selected from the HPCSA register list. Data collection was by a self-administered questionnaire.

Sixty six percent of physiotherapists in Gauteng Province and 68% in Limpopo Province agreed that promotive services are required whereas the percentage for physiotherapy assistants in Gauteng province and Limpopo province were 78% and 89% respectively. Preventative services were suggested by 82% and 85% by physiotherapists and 95% and 96% by physiotherapy assistants in Gauteng and Limpopo. Eighty nine percent and 88% of physiotherapists, 80% and 85% of physiotherapy assistants in Gauteng and Limpopo respectively agreed that curative services are required. Rehabilitative services were suggested to be required by 83% and 90% of physiotherapists, 85% and 95% by physiotherapy assistants in Gauteng and Limpopo respectively.

KEY WORDS: PHYSIOTHERAPY, PRIMARY HEALTH CARE, PROMOTIVE, PREVENTATIVE, CURATIVE AND REHABILITATIVE.

INTRODUCTION

The concept of Primary Health Care (PHC) was first introduced in 1978 at Alma-Ata (Kazakhstan) in response to the international sense of despair at inadequate health care. The concept of PHC encompasses a political philosophy that calls for radical changes in both the design and concept of traditional health care services. It advocates an approach to health care based on principles that allow people to receive care that enables them to lead socially and economically productive lives (Dennill, 1995). A PHC approach includes promotive, preventative, curative and rehabilitative care (WHO, 1978).

Since 1994 there has been a reorientation of the health care system in South Africa to a PHC approach, which is being implemented through the district health system. A situational analysis conducted in 1997, confirmed that rehabilitation services in South Africa (physiotherapy included) are largely underdeveloped and inaccessible to the majority of the population, especially those who live in rural areas (National Department of Health, 2000). Where services exist, the focus is usually institution-based and as such the needs of the clients are not completely satisfied. However, it is worth noting that provinces are in the process of establishing mechanisms to extend the coverage of rehabilitation services including physiotherapy to the majority of the population. However as is the case with other public health services, the poorest of the poor are the ones who struggle to access these services. Despite advances made in the provinces that have access to more resources such as Gauteng and Western Cape many people in these provinces still do not have access to rehabilitation. The reasons for this are poverty-related, as well as the fact that services are concentrated at the tertiary institutions and private sector service providers in urban areas- (National Department of Health, 1998).

Physiotherapy forms an integral part of rehabilitation, which in turn forms an integral part of services offered at a PHC level. Provision of physiotherapy services at a PHC level should be based on the four pillars of PHC namely promotive, preventative, curative and rehabilitative care (SASP, 1993).

The aim of this study was: to determine and compare the opinion of physiotherapists and physiotherapy

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assistants with regards to physiotherapy services required at a PHC level in the two provinces of South Africa i.e. Limpopo and Gauteng.

METHOD

This was a descriptive study using a self-administered questionnaire to obtain information about demographic data of the participants and their opinions about physiotherapy services required at a PHC level.

The population consisted of all the physiotherapists and assistants registered with the Health Professions Council of South Africa (HPCSA) in Gauteng and Limpopo Provinces.

Systematic sampling for physiotherapists in Gauteng province was done. In Gauteng every third physiotherapist and all assistants on the HPCSA register list were included. The sampling method was done for physiotherapists in Gauteng province because of the imbalances in the numbers of physiotherapists between Gauteng and Limpopo province. A representative sample of the population of physiotherapists was calculated out of the total number of physiotherapists in the province. In Limpopo all physiotherapists and assistants were included in the study.

The sample size consisted of 728 physiotherapists and physiotherapy assistants in both Gauteng (574) and Limpopo provinces (154). In Limpopo province 47 questionnaires were posted to assistants and 107 to physiotherapists. In Gauteng questionnaires were posted to 60 assistants and to 514 physiotherapists.

Gauteng province is 97% urban and 3% non-urban, whereas Limpopo is 89% rural and 11% urban (Statistics South Africa, 1996). This allowed for a comparison between the two provinces and identification of possible differences in the PHC services that would be suggested for an urban or rural area.

Ethical clearance from the committee for the Research on Human Subjects at the University of the Witwatersrand was obtained M03-09-23

A covering letter and questionnaire was posted to all. Included was a self-addressed envelope for the return of the questionnaire.

In order to improve the return rate of questionnaires a reminder letter was sent to all subjects four weeks after the initial postage.

Once the data had been captured the data were analysed using Fischer's exact test, with a p-value = or less than 0,05.

RESULTS

DEMOGRAPHICS

The final number of questionnaires returned was 171.

The total response of 171 was divided into the following population groups:

Black	:	83
White	:	80
Indian	:	5
Coloured	:	3

The Indian and Coloured groups were excluded because the numbers were too small for analysis. The results are thus presented based on the two remaining population groups namely black and white.

The final number of questionnaires analyzed was 163

There was no significant difference in terms of race, gender and age between the physiotherapists and assistants in both provinces.

More physiotherapists worked in the public sector in Limpopo than in Gauteng (p=0,03).There were significantly more academic physiotherapist in Gauteng (p=0,01). More physiotherapists in Limpopo worked in district hospitals (p=0.00) than in Gauteng (32.35% and 3.26% respectively.)

More assistants in Limpopo province work in public health care than their Gauteng counterparts (0,01). In Gauteng province (p=0,05) there were more assistants in the private health care sector than in Limpopo province.

There are greater numbers of assistants in the districts hospitals in Limpopo province than in Gauteng province (p=0.01). (See table 1)

More physiotherapists and assistants in Limpopo province have worked in a PHC setting than in Gauteng (p=0,01), and have more experience in PHC setting as compared to Gauteng provinces (p=0,01) (See table2)

Both physiotherapists and physiotherapy assistants in both provinces seem to agree that all the activities listed under promotive services are required. Creating a supportive environment by increasing access to physiotherapy and health related information and providing health education to individuals and groups seem to be the services most required in both provinces. Physiotherapy assistants are more concerned with the advocacy and mediating services at a PHC level particularly in Limpopo province. (See Table 3)

Both physiotherapists and physiotherapy assistants in Limpopo and Gauteng agree that all the activities listed under preventative services are required. Identification of health risks seems to be the service that gained the highest level of recommendation as a preventive activity. The physiotherapy assistants placed slightly more emphasis on preventive services than the physiotherapists. (See Table 4)

Physiotherapists in Gauteng (81.11%) felt that cardiopulmonary conditions should be assessed and managed at PHC level as opposed to only 62.50% of physiotherapists in Limpopo province (p=0.05). (See Table 5)

Eight two percent of physiotherapy assistants in Gauteng felt that pain management should be one of our aims as opposed to 55% of those in Limpopo province (p =0.01).

Only 82.35% of physiotherapy assistant in Gauteng felt that integrating clients into their communities was important as opposed to all the assistants in Limpopo (p = 0.01).

The most important aims of treatment for physiotherapy services at a PHC level in both provinces was thought to be, to improve muscle strength, mobility, function and integration of clients into the community. (See Table 6)

The construction of simple assistive devices for daily living from locally available materials or out of appropriate paper based technology was felt to be important by 90.63% of those in Limpopo province as opposed to 71.43% in Gauteng (p=0.03).

More physiotherapy assistants in Limpopo felt that assistive devices should be provided (0.01). (See Table 7)

DISCUSSION

Physiotherapist from both provinces felt that advocacy and mediation were not

Table 1: Work sector of physiotherapists and assistants

	Physiotherapists			Physiotherapy Assistants		
	Gauteng %	**Limpopo %**	**p-value**	**Gauteng %**	**Limpopo %**	**p-value**
Sector working in:						
Public health care sector	28.26	50	0.03	58.82	95	0.01
Private health care sector	65	47.06	0.07	41.18	10	0.05
Academic (education)	19.57	2.94	0.02	5.88	0	0.45
Level of Care:						
Tertiary hospital	7.61	11.76	0.48	5.88	10	1.00
Secondary hospital	8.70	5.88	0.72	35.29	25	0.71
District hospital	3.26	32.35	0.00	11.76	55	0.01
Clinic	8.70	8.82	1.00	5.88	5	1.00
Private rooms	30.43	20.59	0.37	29.4	20	0.70
Private hospital	51.09	32.35	0.07	5.88	5	1.00
Academic	20.65	2.94	0.01	0	0	1.00
Time Working in Current Sector:						
< than 1 year	22.83	35.29	0.06	11.76	5	0.81
1-5 years	28.26	41.18	0.06	5.88	5	0.81
6-10 years	16.30	11.76	0.06	23.53	15	0.81
> than 10 years	32.61	11.76	0.06	58.82	75	0.81

Table 2: Work Experience in PHC for Physiotherapists and Assistants

	Physiotherapists			Physiotherapy Assistants		
	Gauteng %	**Limpopo %**	**p-value**	**Gauteng %**	**Limpopo %**	**p-value**
Worked in PHC	35.8	54.55	0.01	23.5	45	0.01
Years worked in PHC setting						
< 1 year	88	73.53	0.01	82.35	60	0.12
1-5 years	7.6	17.65	0.01	0	15	0.12
6-10 years	0	8.82	0.01	17.65	10	0.12
> 10 years	4.35	0	0.01	0	15	0.12

Table 3: Promotive services

	Physiotherapists			Physiotherapy Assistants		
	Gauteng %	**Limpopo %**	**p-value**	**Gauteng %**	**Limpopo %**	**p-value**
Advocating for provision of basic needs e.g. housing, sanitation etc	30	25	0.65	50	75	0.16
Mediating between different sectors for provision of service e.g. education, welfare etc	45	50	0.68	62.50	85	0.14
Creating supportive environment by increasing access to physiotherapy and health related information	95	100	0.57	100	95	1.00
Providing health education to individuals/ group(s)	96.74	97.06	1.00	100	100	1.00

Table 4: Preventative services

	Physiotherapists			Physiotherapy Assistants		
	Gauteng %	Limpopo %	p-value	Gauteng %	Limpopo %	p-value
Identification of health risks at homes, schools and work	89.13	87.88	1.00	100	100	1.00
Implementation of appropriate screening procedures at homes, school and work	82.42	81.25	1.00	93.75	95	1.00
Designing intervention strategies in order to reduce/eliminate the health risks	80.2	87.88	1.00	93.75	95	1.00
Monitoring and evaluating health risks	76.67	84.38	1.00	93.75	95	1.00

Table 5: Curative services

	Physiotherapists			Physiotherapy Assistants		
	Gauteng %	Limpopo %	p-value	Gauteng %	Limpopo %	p-value
Neurological	96.74	93.94	0.60	87.50	100	0.20
Orthopaedics	89.01	87.88	1.00	100	95	1.00
Paediatrics	95.60	96.97	1.00	82.35	94.74	0.32
Musculoskeletal	93.41	87.88	0.45	81.25	88.89	0.64
Cardiopulmonary	81.11	62.50	0.05	64.71	66.67	1.00
Gerontology	79.78	91.18	0.18	64.71	66.67	1.00

Table 6: Detailed Curative Services

	Physiotherapists			Physiotherapy Assistants		
	Gauteng %	Limpopo %	p-value	Gauteng %	Limpopo %	p-value
Managing pain	73.81	75.76	1.00	82.35	55	0.01
Improving exercise capacity (endurance)	77.38	78.79	1.00	82.35	95	0.31
Improving muscle strength	78.57	87.50	0.42	88.24	100	0.20
Improving mobility	88.64	96.88	0.28	100	100	1.00
Improving function	97.80	100	1.00	100	100	1.00
Environmental analysis and adaptation	83.15	90.91	0.39	64	85	0.25
Integrating clients into the community	83.15	90.63	0.39	82.35	100	0.01

important roles. It is of great concern that physiotherapists see these services as belonging to other professionals, like lawyers. According to the Ottawa Charter a healthy nation needs certain conditions to be in place and as health care practitioners including physiotherapists should advocate for favourable conditions to maintain good health (WHO 1986). Often physiotherapy treatment will be ineffective if other basic needs are not met first.

Assistants on the other hand agreed that advocacy and mediation are activities they should be involved in at a PHC level. This role was seen as more important in Limpopo province where assistants are involved in advocacy for their clients and where poor health conditions require more advocacy services. Assistants probably have closer contacts with the reality of poor health caused by depressed socio-economic conditions and are more aware of the need to be proactive in improving the conditions, which many of their clients in the rural area experience.

All respondents felt that physiotherapy has a general role in promoting health and prevention of health-related

Table 7: Rehabilitation services

	Physiotherapists			Physiotherapy Assistants		
	Gauteng %	**Limpopo %**	**p-value**	**Gauteng %**	**Limpopo %**	**p-value**
Providing assistive devices	80.46	87.50	0.43	70.59	100	0.01
Constructing simple assistive devices for daily living from locally available materials or out of appropriate paper based technology	71.43	90.63	0.03	68.75	90	0.20
Teaching patients how to use this assistive devices	91.21	93.75	1.00	88.24	100	0.20
Teaching basic maintenance of wheelchair and other assistive devices	87.78	93.94	0.51	93.75	90	1.00
Assessing people with disability for the need of specialized assistive devices	87.78	93.94	0.51	88.24	95	0.58
Assessing people with disability for placement in an educational institution, work, sporting purposes etc	73.33	82.35	0.35	70.59	95	0.08
Designing and implementing treatment and rehabilitation programmes for people with stroke, amputation	91.21	96.88	0.44	94.12	90	1.00
Guiding the primary health care doctor in assessment of the degree of disability for disability and other grants	87.78%	93.94	0.51	81.25	95	0.30
Designing and directing ”needs driven awareness raising” e.g. on disability issues	79.12	81.25	1.00	88.24	100	0.20
Screening and referring for surgical release of contractures and other corrective procedures	84.62	90.63	0.55	93.75	100	0.44
Assessing accessibility of clinics and other facilities within the community for people with disability	80.22	90.91	0.18	94.12	95	1.00
Conducting disability survey in order to establish prevalence of disability in the area	74.44	83.87	0.33	81.25	90	0.63
Establishing and running support groups	80	84.85	0.61	82.35	95	0.31
Training of caregivers and volunteers	96.67	96.88	1.00	88.24	95	0.58

problems by means of health education and promoting self-care of individuals and communities at a PHC level.

In curative services, conditions to be assessed and managed in ascending order as identified by physiotherapists are neurological and paediatrics. In Limpopo province gerontology is placed third before orthopaedics and musculoskeletal with cardiopulmonary being seen as the least important. Gauteng physiotherapists placed cardiopulmonary and gerontology last on their list.

Assistants in both provinces place orthopaedics near the top of the list with neurological, paediatrics and musculoskeletal conditions next. Gerontology and cardiopulmonary conditions were

considered to be less important, by assistants in both provinces.

The findings of this study are different from the results described by Kakembo et al (1996), where orthopaedics and respiratory conditions were the most commonly seen conditions. Kakembo's results are also supported by Akpala et al (1988), who showed that 94% of conditions seen at a clinic in London were due to musculoskeletal and orthopaedics problems, followed by respiratory conditions. The findings of Mamabolo and Mudzi (2003) in their study in Gauteng province are in agreement with this study as they found that although orthopaedics and respiratory conditions are commonly seen in this province, neurological conditions are equally prevalent.

Physiotherapists and assistants in both provinces indicated that the improvement of mobility and function were the most important activities needing to be undertaken by physiotherapists. Physiotherapy personnel in Limpopo province are slightly more concerned with the aim of integrating the client back into the community. Mobility and function are therefore seen as important as a step to reintegration according to the physiotherapists and physiotherapy assistants in both provinces. The emphasis therefore on reintegration in Limpopo is realistic as they attend to more people in the community and mobility constraints are greater due to poor infrastructure.

The response was overwhelmingly positive about rehabilitation services in both provinces by both physiotherapists and assistants. The need to provide assistive devices, teach patients how to use these aids, designing and directing "needs driven awareness raising", screening and referring for surgical release of contractures and other corrective procedures were seen as more important by physiotherapy assistants in Limpopo province where possibly their clients have less resources and access to commercial adaptations. The physiotherapists in Limpopo province felt that training caregivers and volunteers, designing and implementing treatment and rehabilitation programmes for people with disabilities were important. Teaching basic maintenance of wheelchairs and other assistive devices and guiding the PHC doctor in assessment of the degree of disability for disability grants were seen as the most important requirements in their province. Their Gauteng counterparts felt that the following were the most important rehabilitation services required: training caregivers and volunteers, teaching patients how to use assistive devices and designing and implementing treatment and rehabilitation programmes for people with disabilities.Both professional categories in both provinces felt strongly that all rehabilitative services should be offered at a PHC level. However assistive devices and basic maintenance of wheelchairs were seen as being the role of occupational therapy rather than physiotherapy showing that rehabilitation services will have to overlap at PHC level between different rehabilitation personnel.

CONCLUSION

The provision of promotive, preventative, curative, and rehabilitative services was seen as required at a PHC level by both physiotherapists and assistants in both provinces with no major significant differences between the two provinces.

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