Rehabilitation model to promote interprofessional practice at primary health care level in the Western Cape of South Africa

NONDWE MLENZANA AND JOSE FRANTZ

Department of Physiotherapy, University of the Western Cape, Private Bag X17, Bellville, Cape Town.
E-mail: nmlenzana@uwc.ac.za

Abstract

Rehabilitation services at primary health care level in South Africa are considered as essential services for the disabled community. Currently there are challenges with implementation of rehabilitation services at community level in South Africa. Hence it is important to explore and identify gaps in rehabilitation services at primary level of care. This was a descriptive, explorative design using both quantitative and qualitative methods of data collection. Patients and service providers were purposively selected from selected community health centres. Quantitative data were analysed descriptively. Qualitative data were analysed and presented as themes. The majority of patients (n=365) interacted with only one rehabilitation professional and missed out on interdisciplinary team members. Twelve percent (12%) of the service providers did not ask permission to consult their patients. Patients were dissatisfied with rehabilitation service delivery. Patients were not happy with rehabilitation services and rehabilitation service providers did not focus on a patient-centred approach. The resultant recommended development of a rehabilitation model was based on the health care plan 2030 document that advocates for inclusion of strategies for clear access to rehabilitation services and rehabilitation interventions. Rehabilitation services will change from a therapist to a patient-centred approach and services will be viewed differently.

Keywords: Rehabilitation, health, care, service provider, patients.

How to cite this article:

Introduction

Over the last 20 years, rehabilitation services in South Africa have undergone major changes within the health care system, partly because of a change in the political climate and partly because of changes within health care models. Politically, when the African National Congress (ANC)-led democratic government came to power in 1994, it developed various policies aimed at introducing changes in the lives of the South African population, especially in the underserviced peri-urban and rural environments (African National Congress, 1994). The plan for the government was to develop a national health system offering affordable health care, of which the focus would be on primary health care to prevent disease and promote health, as well as to cure illnesses (Louw &
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Based on lessons learned regarding gaps in delivery of healthcare services by the Western Cape Department of Health (WCDoH) at primary health care level, development of the 2030 health care plan was to fill in the gaps identified at primary health care level (Western Cape Government Health, 2007). Health care within South Africa is managed at national and provincial level. Within the National Department of Health (NDoH), key stakeholders made a conscious decision to improve health services within the Western Cape. This Health plan aimed to focus on the following points to improve the health service: 1) client centred quality of care; 2) a move towards an outcomes-based approach; 3) the PHC philosophy; 4) strengthening the district health services model; 5) equity; 6) an affordable health service; and 7) building strategic partnerships (Western Cape Government Health, 2007). Taking into account these facts, the researcher identified the need to further explore the client-centred quality of care and the PHC philosophy based on the care of people with disabilities at rehabilitation centres.

With regards to rehabilitation services, the key stakeholders needed to include the patient, the caregiver and the service provider. Rehabilitation is a vehicle that can be used to address the impact of disability as it is a process that assists with addressing the impact of disability on the lives of PWDs by contributing to their sense of autonomy, self-worth and social participation (Eva & Wee, 2010). Success of the process of rehabilitation is dependent on effective and efficient communication among all the identified parties. Important components of client-centred rehabilitation should include individualisation of programmes to the needs of the client for a smooth transition between rehabilitation programmes and the community; sharing of information and education that is appropriate to the time, and, according to the clients’ wishes, family and peer involvement in the rehabilitation process (e.g. emotional support); coordination and continuity within and across sectors (e.g. access to rehabilitation through more than one door, follow-up as a continuum of access); and outcomes that are meaningful to the client.

Health care within South Africa is managed at national and provincial level. Within the National Department of Health (NDoH), key stakeholders made a conscious decision to improve health services within the Western Cape. This led to the development of the National Rehabilitation Policy (NRP) in 2000, which focused on improving accessibility to all rehabilitation services in order to facilitate the realisation of every citizen’s constitutional right to have access to health care services. This Policy aimed to serve as a vehicle to bring about equalisation of opportunities and to enhance human rights for persons with disabilities with regard to rehabilitation services (Government Printers, 2000).

In the Western Cape, the DoH has committed to providing equal access to quality health care for all the people of the Province (Western Cape Government,
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2005). Primary health care was intended to be the foundation of the national health care system, with a sustainable long-term relationship between interdisciplinary health care teams and clients (Bonnie, Brent, Ken & Philip, 2007).

In South Africa, however, it is evident that rehabilitation professionals are based mostly at the tertiary level of care (in-patient), whilst the need is more at the primary level of care (out-patients). People with disabilities are referred mainly to the primary level of care. Healthcare professionals at the primary level of care are overburdened and frustrated by a heavy patient load (Mlenzana & Mji, 2010). Rehabilitation professionals at this level of care book patients for longer periods so that they see a more manageable number of patients per day. Patients often have to wait for two to three weeks to be seen by rehabilitation professionals at the primary level of care. Hence the need to develop a rehabilitation services model based on a gap identified at primary health care level through information gained from patients, service providers and caregivers.

Methods

Study design

Mixed methods of descriptive and exploratory designs were employed to collect quantitative and qualitative data. The study population included purposively selected patients, caregivers and service providers from selected community health centres.

Population and sample

Patients who physically accessed rehabilitation centre and have physical disability were selected. A department with referrals from doctors for rehabilitation was visited; and the folders were reviewed to determine if the patients were suitable for the study. A total of 370 records of patients who presented with physical disabilities were selected. Patients were selected from each rehabilitation centre using Yamani formula $n = \frac{N}{1 + Ne^2}$ (Israel 1992), where the letter n stands for the study sample; N for the study population; and e for constant error = 0.05, was used for each condition to obtain the sample of the study to ensure that patients seen at each centre will represent the population for this study.

The study population included rehabilitation service providers working at the selected rehabilitation centres with more than one year experience working with patients with physical disabilities. Researcher targeted all willing service providers working at these centres (n=43). These centres do not have all
rehabilitation professionals as this number represented rehabilitation professionals working at these centres.

Caregivers that participated in this study involved all caregivers who accompanied people with disabilities to selected rehabilitation centres in the Western Cape, South Africa. Clients who had caregivers were randomly selected from the 370 patients to participate in the study. Every third patient was asked if they have a caregiver that accompanied them to the CHC. The sample consisted of the caregivers of 13 individuals who were conveniently selected for a focus group discussion.

**Instruments**

All participants that were willing to participate in this study read the information sheet and signed a consent form. They filled in the questionnaires that required demographic details and information that was based on rehabilitation experience. Other data collection instrument was data extraction tool that focused on process of care of patients that visited the CHCs. Both questionnaire and data extraction tool were piloted for information clarity. Changes were made to the questionnaire. Focus group discussions were conducted. Data was collected by means of semi-structured interviews.

**Data analysis**

The information from the interviews was transcribed verbatim. The interviews were analysed using Braun and Clarke’s (2006) thematic analysis guide which involves six phases i.e.: 1) Familiarising with the data, 2) Generating initial codes, 3) Searching for themes, 4) Reviewing themes, 5) Defining and naming themes and finally, 6) Writing up a report. Thematic analysis is seen as a basic method for qualitative analysis and encompasses everything from identifying, analysing and reporting patterns within data.

Phase one involved familiarising themselves with the data, and then generating initial codes. This was followed by searching for and reviewing the themes under consideration in the transcripts. The researcher then defined and named the themes and lastly produced a report based on the first five steps of analysis. Trustworthiness of data collection process was ensured.

Quantitative data were entered and cleaned by two data capturers in SPSS version 17.0 and Microsoft Excel. A double entry system was used for quality assurance. Descriptive statistics and data analyses were performed in order to convert independent variables into frequencies and percentages.
Results

Quantitative data:

Socio-demographic information

Patients:

Of the 370 records of participants in the sample, 43% were male and 57% were female, with a mean age of 51.2 years (SD=14.4 years). The patients' ages ranged from 18 to 93 years. The rehabilitation professionals mainly seen by patients were physiotherapists (n=365) and doctors (n=91), while the rehabilitation professional least seen was a nurse (n=18) and a social worker (n=4). No patients were seen by the psychologist, dietician or prosthetist at this level of care as they were not available. Some rehabilitation professionals had no opportunity to consult with patients with physical disabilities at the rehabilitation centres, as patients were not exposed to a variety of rehabilitation professionals during their visit(s) to the primary health care centre.

Service providers:

Of the 82 service providers targeted at the centres, 43 service providers volunteered to participate in the study, yielding a response rate of 52%. Table 1 illustrates the socio-demographic information of the service providers.

Table 1: Socio-demographic information of service providers

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>7</td>
<td>16%</td>
</tr>
<tr>
<td>Female</td>
<td>36</td>
<td>84%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-30 years</td>
<td>22</td>
<td>52%</td>
</tr>
<tr>
<td>31-40 years</td>
<td>6</td>
<td>12%</td>
</tr>
<tr>
<td>41-50 years</td>
<td>8</td>
<td>19%</td>
</tr>
<tr>
<td>&gt;50 years</td>
<td>7</td>
<td>17%</td>
</tr>
<tr>
<td>Profession</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor</td>
<td>19</td>
<td>44%</td>
</tr>
<tr>
<td>Nurse</td>
<td>5</td>
<td>12%</td>
</tr>
<tr>
<td>Physiotherapist</td>
<td>3</td>
<td>8%</td>
</tr>
<tr>
<td>Occupational therapist</td>
<td>4</td>
<td>9%</td>
</tr>
<tr>
<td>Speech Therapist</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Social worker</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Dietician</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Orthopaedics sister</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Clinical nurse practitioner</td>
<td>7</td>
<td>17%</td>
</tr>
<tr>
<td>Health promoter</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Salary level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 6</td>
<td>5</td>
<td>12%</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 7</td>
<td>9</td>
<td>21%</td>
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<tr>
<td>Level 8</td>
<td>9</td>
<td>21%</td>
</tr>
<tr>
<td>Level 9</td>
<td>14</td>
<td>33%</td>
</tr>
<tr>
<td>Level 10</td>
<td>4</td>
<td>9%</td>
</tr>
<tr>
<td>Level 11</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>Years at current institution</td>
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<td></td>
</tr>
<tr>
<td>1-5</td>
<td>32</td>
<td>74%</td>
</tr>
<tr>
<td>6-10</td>
<td>5</td>
<td>12%</td>
</tr>
<tr>
<td>11-15</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>16-20</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>21-25</td>
<td>3</td>
<td>8%</td>
</tr>
<tr>
<td>&gt;25</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Years in rehabilitation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5</td>
<td>27</td>
<td>64%</td>
</tr>
<tr>
<td>6-10</td>
<td>4</td>
<td>9%</td>
</tr>
<tr>
<td>11-15</td>
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<td>12%</td>
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<tr>
<td>16-20</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>21-25</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>&gt;25</td>
<td>4</td>
<td>9%</td>
</tr>
</tbody>
</table>

The majority of the participants were females (84%) with a mean age of 36 years (SD=12.50 years). The age ranged from 23 years to 64 years. Amongst the service providers the years of working experience ranged from less than 1 year to 44 years with a mean of 12.6 (SD=12.6 years). Years of experience in rehabilitation amounted to a mean number of 8 years (SD=10.0 years). Most of the participants were doctors (n=19), followed by the nursing category (n=13). Other disciplines such as physiotherapists, occupational therapists, social works etc. accounted for 12 of the participants.

**Qualitative data**

The qualitative process suggested by Braun and Clarke’s (2006) was followed in data analyses. These themes are presented below with direct quotations from the participants.

Service Providers:

*Accessibility*

Participants first mentioned the accessibility of the institutions with regard to the building itself and access to the services provided. This was considered satisfactory and providers mentioned the signage at the centres which indicated where patients could access various departments. This is what the patients expressed with accessibility to the centres:
"There is signage... signs are quite high and not all my patients can read" PT Centre A and C
"...we have complaints box and there are no complaints in there instead we get thank you notes" Volunteer Centre B and PT Centre A

Accessibility of rehabilitation professionals

Service providers were dissatisfied with the shortage of rehabilitation professionals. This was a challenge, especially when there was a patient back-log for physiotherapists and other rehabilitation professionals, who saw fewer patients. This back-log can also be associated with catchment areas that are covered by these centres.

"... We have a back log of patients that stretches up to a month later, so if I am seeing patients now, he [a new patient] will only get an appointment in 2-3 weeks' time" PT Centre B
""...if they have chronic conditions they might be put on a waiting list and might be asked to attend the group sessions...". PT Centre C

Patient consent

Health care professionals, when dealing with patients, are expected to request permission from the patients to ask, assess and treat the patients when consulted. It is one of the important factors of building a relationship with patients so that they can be open and free to share the cause of the visit to the health centre. When participants were asked if they had requested the consent of the patients to ask, assess and treat them, they said:

"Basically at the beginning of my sessions, I ask for PTE that they become involved, because most of the people are illiterate, we normally ask consent, and explain/inform that it will work, if they come back after every session." PT Centre B.

Family involvement

Strong family support was revealed by one of the centres as patients who attended the centre were mainly children and others had more severe patients who presented with physical disabilities. Other health care professionals were forced to involve families as they had challenges with language during consultation. This is what they said about family involvement:

"I do use a lot of the family support. I will do a lot of phone calls, for some children, I have done some creche visits..." OT Centre B
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“I encourage families and caregivers to come in with my patients as it is important that they see what the patient is doing at their treatment sessions” . PT Centre A.

Equipment

Patients with physical disabilities experience challenges with space and equipment when visiting health care centres. There is limited equipment at the centre, which in most cases is not in good condition and needs to be replaced. Equipment that service providers focused on was consultation room equipment. They expressed themselves in this way:

“I am still waiting for parallel bars and a wax bath. I must get round to ordering new hot packs which will be supplied”. PT Centre A

“we do have high beds, the other thing is, sorry this goes back to equipment, we also need more plinths because our plinths are getting quite old but we have requested some but I think it will take long”. PT Centre C

Staff availability

Currently service providers feel that they are stretched to the limit in terms of numbers of staff. If there are staff absent it further stretches the limited human resources available and this definitely impacts on service delivery. Lack of posts for rehabilitation professionals is a definite challenge that is not in line with the primary health care approach.

“I would also like another physiotherapist to be appointed at Centre G who would then cover the community work as there are so many physiotherapy referrals at the centre that I do not have time to go out into the community”. PT Centre A and Centre C.

Caregivers:

The study sample consisted of thirteen participants, with mean ages of 47 years for caregivers and 59 years for patients. The majority of the caregivers were female and commonly the spouse of the patient.

Themes that emerged from the interviews are presented below.

Finances

The majority of caregivers interviewed voiced that they experienced financial difficulties. The most common financial challenge was the cost associated with transportation. Six of the caregivers expressed that they frequently experienced difficulty with transportation when travelling to and from centres:
“... Every now and then I had to borrow money... for the taxi.” (Caregiver 9)  
“... to go there and back, we pay R100.” (Caregiver 3)

Caregiver-therapist relationship

Categories identified within this theme included caregiver integration in the rehabilitation process, exchange of information by the therapist and, finally, the trust relationship between caregiver and therapist. The majority of caregivers expressed that they had received education and had been included in the rehabilitation process. They furthermore voiced that they had a pleasant interaction with the therapist. This indicates a positive caregiver-therapist relationship. The following excerpts illustrate this point:

“...they give me exercises, they write it down and draw it...” (Caregiver 12)  
“they were not people that you had to be afraid of.” (Caregiver 1)

Caregivers’ physical and emotional health

During the interview process, it became evident that the quality of care provided by caregivers was influenced by support for their own physical and emotional health. The caregivers highlighted that they were not always physically capable of actively assisting the patients and that support from others was welcomed.

“I had a friend...if I had to go somewhere, then there was someone...” (to give physical assistance) (Caregiver 1)  
In addition, it was evident that caregivers often neglected their own emotional needs. Caring for another person also seems to have an impact on the caregivers’ stress levels.  
“...sometimes it was very stressful...” (Caregiver 9)

Facility management

Caregivers highlighted that access to rehabilitation services was not a problem, even when using assistive devices. One of them stated thus:

“...very easy (to access centre with wheelchair)...”(Caregiver 1).  

However, processes within the centres were a challenge, including accessing files prior to therapy and obtaining appointments. Some of them indicated as follows:

“...the department where she has to go (for therapy) is there at the back. Her files are here in front. The distance is far.” (Caregiver 3)
At least eight of the caregivers felt that the frequency of appointments was insufficient. Caregivers highlighted the long waiting periods between follow-up sessions as follows:

“...for an appointment...one month or even two months...” (Caregiver 5).
“They are full, now I just have to be patient...” (Caregiver 13).

**Discussion**

Expectation of service delivery at primary level of care is to address all the needs of the people who presented with disabilities. Patients that visited these rehabilitation centres were not given the opportunity to be referred to or seen by relevant rehabilitation professionals for the types of disabilities with which they presented. Eldar (2000) emphasises that when one visits the Primary Health Care centre presenting with a disability, that person should be consulted by rehabilitation team members as this was not the situation in this study. If one look at the role of the nurses that Long et al. (2002) observed it, as people who motivate and advise patients about options that they have when visiting the health centres, nurses in this study were consulted by only 5% of the patients.

Effective rehabilitation depends on input from a variety of skilled, multi-professional team members. The selected rehabilitation centres had most of the rehabilitation professionals but lacked a number of allied rehabilitation professionals. The results indicated that some professionals were not available at the rehabilitation centres and others were underutilised for rehabilitation services. According to the National Rehabilitation Policy document, there must be an appropriate allocation of resources (financial and equipment) so that all individuals, including health professionals, can access the resources allocated to them.

The primary level of care service is meant to be accountable for the health needs of the needy patients at large, have a relationship with the patients and engage with family members and the community generally about health issues (Hart & Macnee, 2007). The South African government has experienced challenges around budgetary constraints, while shifting services from tertiary institutions to primary health care level, as well as the migration of health professionals, and poor staff motivation (Theunis, van Rensburgh & Classens, 2006). Community health centres in South Africa are seen as first-line centres for all patients who are in need of health services.

It is clear, based on the information presented in table 1, that the majority of the participants are at the lower scale of payment (n=14) as they are new to their field of work and are still learning the process of rehabilitation. Considering the age and years of experience of the service providers with rehabilitation service, it was clear that the majority of service providers are not clear as to how
rehabilitation was implemented at these centres. Cockcroft et al. (2011) strongly believes that if there are complications within government rules and unclear demarcations of duties, service delivery will be affected.

Satisfaction is considered a health outcome, a quality of care indicator and as a predictor of patient behaviour. It is perceived as a social construct between the consumers of health care, health care providers and a component as well as an outcome of effective care (Mahoney et al., 2004). Service providers in this study are dissatisfied with the shortage of staff hence they feel strongly that there is a need for additional staff members to be employed to minimise their workload. This impacts on service delivery as service providers are overwhelmed by their workload. Family is one of the stakeholders in the rehabilitation process. It is seen as a support system for patients who are presenting with disabilities. Fuller et al. (2011) sees family as a collaborator in patient management to produce best clinical outcomes. Inadequate equipment creates problems with service delivery. In this study equipment is inappropriate to treat patients. Patients cited in the Scheer et al. (2003) study felt that offices, examination and diagnostic equipment hinder service provision to them. Examination tables, x-ray and mammography machines and scales made patients with physical disabilities to be physically draining and found the exercise of using these as stressful.

**Conclusion**

In this study rehabilitation service delivery has been identified as a challenge both nationally and in the Western Cape Province. Thus the researcher deemed it important to determine the process of care within rehabilitation services in order to address this challenge by involving all the key stakeholders, such as persons with disabilities, service providers of the rehabilitation services and caregivers of patients with disabilities. Currently we need to realise that rehabilitation services within the Western Cape in South Africa are needed but that there are challenges that must be addressed if the Department of Health is to meet its goals by 2030. It is clear that within rehabilitation services there is a clear link between the service provider, the patient and the caregiver of the patient. This link is important if we aim to meet the Department of Health’s 2030 vision of a patient-centred approach to health care. Important components of client-centred rehabilitation should include the following: individualisation of programmes to the needs of the client for a smooth transition between rehabilitation programmes and the community; sharing of information and education that is appropriate, timely, and according to the clients’ wishes; family and peer involvement in the rehabilitation process (e.g. emotional support); coordination and continuity within and across sectors (e.g. access to rehabilitation through more than one door, follow-up as a continuum of access); and outcomes that are meaningful to the client.
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