



# Physiotherapists' views regarding accessibility of Parkinson disease patients to physiotherapy centers

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## Abstract:

Introduction: Parkinson's disease (PD) is a progressive neurodegenerative disease mainly characterized by motor defects such as tremor and postural instability. The number of patients with Parkinson's disease (PD) is increasing in all aging societies. This population requires immediate physiotherapy management to maintain and improve their quality of life. The aim of study to explore physiotherapists' views about the barriers facing Parkinson's patients on access in centres of physiotherapy in Al-Zawia city, Libya. Method: An exploratory qualitative study is design to explain physiotherapists' views. Twenty physiotherapists from seven physiotherapy centres were approached individually and invited to participate. Participants were interviewed and asked about their experiences with Parkinson's patients. Result and discussion there are barriers in the communication with elderly Parkinson's patients and also, the doctors with physiotherapists, lack of access (referral) and poor awareness of doctors about physical therapy role as one of the barriers, the economic part of barriers that limit patient's access to the center because as expensive private facilities, and long-term treatment plans with slow improvement lead to a lack of patient's access to the center, on other hand patient fell bored from ong treatment, beside the patients mood that effected in patients treatment such as anxiety and depression, while the anxiety is the most mood disorder . All of these factors and others led to frequent missing sessions and limiting patients' access to physiotherapy centres. Conclusions: The study found that there were gaps in communication between patients, physiotherapists, and physicians. And there lack of patient access in the physiotherapy centres because of poor referral and awareness/knowledge about the benefits of physiotherapy programs for patients with PD. Another issue the study found there was the high cost of the therapy sessions and long-term program compared with the low level of improvement that made patients discontinue their treatment.

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**Keywords:** Parkinson, accesses, physiotherapy, rehabilitation

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## Introduction

Parkinson's disease (PD) is a common neurodegenerative disorder characterized clinically by Parkinsonism: resting tremor, bradykinesia, rigidity, and postural instability (1, 2). The majority of Parkinson's disease patients suffer from nonmotor disabilities, for instance, cognitive impairment, autonomic dysfunction, sensory dysfunction, and sleep disorder (3).

In developing countries, almost one out of 100 people older than 60 years are affected by Parkinson's disease (PD), which is estimated to affect 6 million people worldwide. People with PD can present with movement disorders, postural instability, reduced mobility, and an increased risk of falling. PD can be advocated as one form of exercise, especially for those who are newly diagnosed or who have mild to moderate disease severity (4, 5). Despite the advances of medications and neurosurgical management of PD, patients become disabled over time. For instance, dopaminergic medication is found to be effective in decreasing bradykinesia and rigidity, but they have far less influence on gait impairment, postural instability, and risk of falling. The long-term usage of such medication may cause several side effects; like dyskinesia, freezing related to motor fluctuations, and orthostatic hypotension (4). Parkinson's Patients should be referred to physiotherapy. The purpose of

physiotherapy is to improve or maintain a patient's current conditions and prevent secondary complications. According to the results of national surveys in the United Kingdom (UK) and the Netherlands (2013), the chance of being referred to physiotherapy is currently between 7 and 38 % in the UK and 48% (for six months) in the Netherlands (6). The main focus of physiotherapy practice is gait, balance, posture (stooped posture, joint immobility), and task-oriented approaches. However, there is uncertainty about the motivation for (none) referral, the nature of the treatment given by physiotherapists, and the satisfaction of patients with physiotherapy (4). According to Keus et al (2012) physiotherapy management is given in the physical therapy center or at the patient's home. The main goals for treatment were improving gait, general physical condition, posture, balance, and improving cardiovascular fitness. The treatment mainly consisted of active exercises, treadmill, mirrors, and applied massage. Hydrotherapy was also found to be very effective in treating Parkinson's patients (4, 7). The most challenge facing physiotherapy is the low rate of referring Parkinson's patients (4). So this study aimed to explore physiotherapists' views about the barriers facing Parkinson's patients on access in centres of physiotherapy in Al-Zawia city, Libya.

### **Aim and Research Question:**

What are the physiotherapists' views about the barriers facing Parkinson's patients on access in centers of physiotherapy?

### **Objectives:**

To explore physiotherapists' views about the barriers facing Parkinson's patients on access in centres of physiotherapy in Al-Zawia city, Libya.

### **Methodology**

The study was conducted the 7 health centres in Al-Zawia city were the participants purposefully selected based on their experiences and availability. These centres are: Abogalasha Rehabilitation Center, The Libyan Foreign Center, Al-Zawia University physiotherapy staff have experience with patients, Nowat Almostagbal clinic, Almoktar Rehabilitation Center, 10 March Clinic and Ben Sheape Rehabilitation Center. Study design and population: In outlook of the nature of the study and its objective, which was to explore physiotherapists' views about the barriers facing Parkinson's patients on access in centres of physiotherapy, the exploratory qualitative design was used to explain their views openly. According to Creswell and Clark (8), qualitative methodology was used to explain human behaviour. The physiotherapist professionals from the centres were purposively selected, composed of 20 participants who attended

### **Referral and access**

the interviews. All were approached individually and invited to participate as a result of their experiences with working with Pd. Data collection and analyses: The aim of this research was to explore physiotherapists' views about the barriers facing Parkinson's patients on access in centres of physiotherapy in Zawia, Libya. After the presentation of the question of the interviews were used to collect data from the selected participants, the interviews were conducted in Arabic as most participants were speak and comfortable with this language. Then the researchers translated the interviews with English language. The interviews were audio-recorded after receiving permission from participants. The data collection methods for the interviews are presented below. The audio from interviews were transcribed verbatim for analysis. The analysis began with the researchers listening to the voice recordings in order to become familiar with the data, then transcription of the information from the audio recording. The researchers analysed the data manually by using the Microsoft word 2013. Data was analysed in relation to the five categories, which had internal convergence and external divergence (9).

### **RESULTS**

The physiotherapists participated in study were 20 females and males in seven centres aged between (25 – 55) years and experience years between (1 – 28) years. The following present results of their views:

This study showed there is a lack of patient access in the physiotherapy centres. Also, the referral is poor and doctors have poor awareness about the importance of physical therapy. Also said the doctors just deal with medication only.

“Trouble for doctors specializing in this disease they don't referral to physical therapy...” (PT 12)

“Due to dealing neurologists as only medication. Necessary to transfer patients to physical therapy to help him...” (PT 1)

“Yes treated from five to six cases from the year 2012 to 2018”. (PT 6)

### **Communication**

The participants said their lack of communication between: doctors and physiotherapists and communication between them and their patients, also need to educate patients specially are their old.

“There must be a link between Neurology physicians and physical therapy”. (PT 7)

“...This disease affects older people more often..., so we have to communicated and educate using TV and video...”. (PT9)

### **Economic**

Physiotherapists said limited patient's access to the center because the high cost of treatment session.

“...That's probably the costs...” (PT 14)

“not access...the mostly due to cost...” (PT 9)

## Long-term treatment

Long-term treatment with slow improvement lead to a lack of patient's access to the center, and the patients do not attend their courses because the patient felt bored as the participants said.

“...also because patients do not attend because of the long duration of treatment with improvement is simple” (PT 8)

“...Because the duration of treatment is very long and patient getting bored from long treatment...” (PT 3)

## Physiotherapist as Psychologist

Some physiotherapists recommended that the psychological support with therapeutic plan is important and some of physiotherapists take this role, to relax patients before start treatment plan.

“The problem is the patient's psychological status is deteriorated too” (PT 9)

“...we recommend that patients undergo physical therapy along with psychotherapy to promote patient's relaxation and then work his/her strengthening exercises”. (PT 14)

“Psychological support is needed until the patient accept the treatment” (PT 8)

## DISCUSSION

This study was conducted to explore physiotherapists' views about the barriers facing Parkinson's patients on access in centres of physiotherapy in Al-Zawia city, Libya.

As the physiotherapy professionals report one of barriers is their poor of access to physiotherapy centers. Where found patients often have inaccessibility to healthcare centres (7). The National

Collaborating Centre for Chronic Conditions (10) recommended that physiotherapy have to be made available throughout all stages of the disease as part of treatment. Referral rates to physiotherapy for people with PD have historically been low in the world. In recent years the number of referrals has increased, with a survey by Parkinson's UK in 2008 (11). However, referring physicians had marginal information about the benefits of physiotherapy in PD, and were often unaware of each other's treatment possibilities. As trends have been found towards positive effects of integrated care programs in the chronically ill this is needed to be improved (7). On other hand the study show there was a lacking connection between professionals and their patients. This led to other problems such as difficulty to inform patients about the important role of physiotherapy in their condition. Which resulted in creating gaps not only between physiotherapists and their patients but between physicians and other professionals. According to Keus (7) patients often have no access to the allied healthcare required. The referring physicians had limited information about the benefits of physiotherapy in PD, also they may have poor communication with their patients. So, the involvement of multi-discipline requires close collaboration and collaboration between medical and other healthcare providers.

In this study present the cost of the treatment as barrier facing access patients to rehabilitation centres. Despite various medical and surgical treatments for PD,

patients gradually develop significant physical problems (11). The number of patients with Parkinson's disease is increasing, which leads to increase costs related to PD care dramatically (7). The patients need to know whether the cost is impartial or reduces the general costs of care (12), especially attended to privet sector. The long-term treatment duration leads patients to be bored as this study show. However, this long therapy program treatment with adequate follow-up is most helpful in checking the progress and eliminating any complications (11). Referral rates of PD patients to physiotherapy be increasing and treatment duration is lengthy which affected treatment and patients' access to get the treatment (4).

The study show other barrier, the mood of patients have strong effected in patients treatment, and associated with postural instability, such as anxiety, depression, and apathy. The anxiety for example, is the most researched mood disorder in regard to balance (13). In multiple studies, anxiety and balance share some common neural circuits that involved in causing some manifestations as anxiety and fear that effected on the patient's treatment (13).

#### Conclusions:

The study results first found the lack in patient access in the physiotherapy centres because of poor referral and awareness/knowledge about the benefits of physiotherapy programs for patients with PD. Second, there were gaps in

communication between patients, physiotherapists, and physicians. Also, was the high cost of the therapy sessions and long-term program compared with the low level of improvement that made patients discontinue their treatment. Finally, psychological support plays a fundamental role in the treatment plan. Physiotherapists in this study recommended that each therapy program should combine physical therapy with psychological treatment. Given the importance of physical activity and the psychological state, patients with Parkinson's disease should be integrated to

participate in it, as it improves anxiety and depression

#### Recommendations:

Arranging for workshops, and regular inter professional meetings increase physicians; awareness of the importance of physiotherapy. Communicated physiotherapists with patients to educate PD patients, provide more services for the Patients, decrease the cost of PD treatment in private sector, and provide psychological therapist for PD patients.

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Appendix1

## Interview Questions

Age

Years of Experience

Have you treated Parkinson's patients before?

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Why Parkinson's patients do not referral to physical therapy centres?

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Have you seen an improvement in the conditions you have treated?

What is the reason why the patients not continue treatment if they referral to physical therapy?

How can help the patients in your experience in this field?