

Physiotherapists' and occupational therapists' perceived barriers and enablers of return to work for survivors after stroke

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ABSTRACT

Stroke impacts on a survivors' ability to return to work. Successful return to work after stroke can enhance both recovery and life satisfaction by improving self esteem and social identity. This study was undertaken to establish therapists' perceived barriers and enablers of return to work of survivors after stroke. A cross sectional study in stroke rehabilitation facilities within Gauteng province in South Africa was conducted. The questionnaire was returned by 36 (68%) of these facilities.

The most commonly perceived barriers were the severity of the stroke survivors' physical impairments ($n = 13$) (36%) and their employment status ($n = 11$) (31%) at the time of having a stroke. The commonly perceived enablers were willingness of the employer to reasonably accommodate the stroke survivor at work ($n = 12$) (33%), family support ($n = 8$) (22%) and increased length of hospital stay to allow for intensive rehabilitation ($n = 7$) (19%). Stigma in the workplace was the only variable which had a statistically significant relationship with the type of clinical facility therapists worked at ($p = 0.02$).

Key words: stroke, return to work, functional capacity assessment, physiotherapists, occupational therapists

INTRODUCTION

Stroke impacts on a survivor's ability to participate in community activities such as returning to work¹ and affects people who are still within the working age.² Successful return to work (RTW) after stroke can enhance recovery and life satisfaction by improving self esteem and social identity.^{3,4} Thus rehabilitation needs to promote RTW rather than focusing just on restoring bodily functions and return to activities of daily living (ADL).⁵

Stroke survivors are usually discharged from stroke rehabilitation when they have no significant aphasia, are independent in ADLs, and have functional ambulation or have reached their maximum functional potential given their impairments.² However, working age group stroke survivors need more complex and cognitively demanding activities after a stroke for them to be successfully returned to work.⁶ Some people with severe brain lesions RTW after stroke while, some with mild brain lesions do not.^{7,8} In a study by Busch et al. 53% of the patients who were considered to be functionally independent did not RTW after stroke. This indicates that severity of the

brain lesion and functional independence are not the only barriers of RTW.

According to the Health Professions Council of South Africa the scope of physiotherapy practice rehabilitation includes: "getting the patient to maximum potential in both work and sport, including adaptation to permanent disabilities" and community care includes "offering services at day hospitals, rehabilitation centres, schools, industries and other organisations." This indicates that physiotherapists and occupational therapists need to think of actual and potential barriers which may prevent a person from returning to work. The plight of people with disabilities with regards to RTW is also acknowledged within the South African Employment Equity Act⁹ in which a former Minister of Labour in the foreword stated that "employees who become disabled are often dismissed for poor performance or incapacity or they resign unnecessarily. They are often encouraged or forced to apply for disability benefits and they tend to retire earlier than other employees do, although if their needs are reasonably accommodated, they can continue as productive employees."

Recent research carried out internationally using

literature review and qualitative research methods established the following barriers of RTW for people with stroke: architectural barriers limiting access to the buildings; lack of appropriate transportation; poor local economy resulting in high levels of young unemployed people; stereotypes against people with disabilities¹; older age at stroke onset; low education level¹⁰; lack of family support⁶; lack of inter-sectoral collaboration¹¹; patients' lack of motivation to RTW; poor physical recovery; and lack of support from employer and colleagues.¹²

The role of the employer as an enabler of RTW is acknowledged by the South African government as indicated within the Employment Equity Act,⁹ which states that an employer has to adhere to a "code of good practice on employment of people with disabilities" which ensures that an employee gets a proper objective assessment to establish: the extent to which they are able to perform work; the extent to which work conditions may be adapted; and the availability of a suitable alternative job.

Research concerning RTW has been conducted mostly in developed countries (e.g. Canada and the United Kingdom), which has limited application elsewhere. There is literature about stroke survivors' perceived barriers and enablers of RTW, however, not much has been done to establish the perceptions amongst therapists especially in developing countries. The context in which therapists work may influence their perceptions of factors that influence RTW and therapists' own beliefs and values can be an enabler or barrier of RTW.¹³ Therapists' perceptions may also be influenced by their knowledge of the possible impairments and activity limitations that may result from the brain lesion and the difficulties that this may cause for work performance whereas stroke survivors' perceptions would be based on their experiences.¹⁴ It is on this basis that this study was undertaken to establish therapists' perceived barriers and enablers of return to work of survivors after stroke. This paper is reporting the results of part of a larger and ongoing study to establish the following: the effect of a workplace intervention programme on the rate of RTW after stroke; current practice in RTW services for stroke survivors; factors which influence RTW after stroke and stroke survivors' perceived barriers and enablers of RTW.

METHODOLOGY

A cross sectional study was performed using a self administered questionnaire with open ended questions about perceived barriers and enablers of RTW after stroke, developed specifically for this study. Content validity of the questionnaire was established with the following group of therapists: two physiotherapists working in the field of neurological rehabilitation, two occupational therapists with vocational rehabilitation experience, three therapists with research experience, and one therapist working in the field of public health.

Each question on the questionnaire was validated against the aims and objectives of the study. Essential questions were added and invalid and redundant questions were removed. Some of the questions were rephrased to improve clarity and questions were rearranged to improve flow of information. After corrections were made the final questionnaire was sent

“The most commonly perceived enablers of RTW after stroke were willingness of the employer to reasonably accommodate the stroke survivor at work . . .”

to the project development team for final endorsement. The questionnaire had the following: basic information about the type of clinical facility and amount and type of patients seen at the rehabilitation facilities in this study; and open questions about perceived barriers of RTW, perceived enablers of RTW.

The questionnaire was posted to all hospital-based stroke



The ability to climb stairs is required in order to access most of the buildings in which the stroke survivors work

rehabilitation facilities (22), primary health care facilities which offer stroke rehabilitation services (i.e. clinics and community health centres) (23) and stroke rehabilitation units not attached to a hospital (8) within the Gauteng province in South Africa (n = 53). Each facility received one questionnaire and was requested to send the responses within three weeks based on consensus among therapists working in that particular facility. A phone call was made to each clinical facility after two weeks to remind them of the research. Questionnaires were returned from 36 (68%) of these facilities (see Table 1). Frequencies and percentages for closed questions were recorded. Responses to open ended questions were categorised into themes and items within each

“... one of the barriers ... is lack of skills for less labour intensive work, and conversely that a higher education level is an enabler ...”

theme were summarised using frequencies and percentages. A Fisher's exact test was used to establish the relationship between clinical facility and perceived barriers and enablers of RTW. Ethical clearance for this study was granted by the University of the Witwatersrand Committee for Research on Human Subjects (Clearance number M081132).

RESULTS

The highest number of responses was from hospital-based rehabilitation facilities 18 (50%) and the lowest was those from stroke rehabilitation units 5 (14%) (Table 1). Twenty-seven (75%) of these clinical facilities provided care for people with stroke who may require intervention to help them



Hand and arm function retraining can help a person cope with jobs that require bilateral arm use

Table 1. The clinical setting in which therapists in this study worked (n = 36)

Clinical setting	n (%)
Hospital based rehabilitation services	18 (50)
Primary Health Care	13 (36)
Stroke rehabilitation unit	5 (13)
Total	36 (100)

Table 2. Common perceived barriers of return to work after stroke (n = 36)

Barriers	Yes n (%)
Severity of the patient's physical impairments	13 (36)
Patient unemployed at the time of having stroke	11 (31)
Cognitive and visual problems	5 (14)
Inability to drive or access transport	5 (14)
Lack of skills for less labour intensive work	5 (14)
Want to receive a government disability grant	5 (14)
Therapists do not have equipment to assess patients for return to work potential	5 (14)
Stigma in the workplace	4 (11)
Rehabilitation staff shortage	4 (11)
HIV/AIDS complications of stroke	1 (3)

RTW if possible. The average number of people with stroke seen at each clinical setting on a monthly basis was 13 (± 15) and of these, the average number of people who required RTW intervention on a monthly basis was 4 (± 3).

The most commonly perceived barriers of RTW after stroke from the therapists' perspective were the severity of the stroke survivors' physical impairments (n = 13) (36%) and their employment status (n = 11) (31%) at the time of having a stroke and the least perceived barrier of RTW was HIV/AIDS complications of stroke (n = 1) (3%) (Table 2). The most commonly perceived enablers of RTW after stroke were willingness of the employer to reasonably accommodate the stroke survivor at work (n = 12) (33%), family support (n = 8) (22%) and increased length of hospital stay to allow for intensive rehabilitation (n = 7) (19%) (Table 3). The least commonly perceived enablers of RTW were long duration of employment at the time of having stroke, being a breadwinner at the time of having stroke and ability to communicate (n = 1) (3% for each of these enablers (Table 3)). Stigma in the workplace was the only variable which had a statistically significant relationship with the type of clinical facility therapists worked at (p = 0.02). Therapists at primary health care facilities perceived stigma in the workplace to be a barrier to RTW after stroke and none of the therapists from the hospital based rehabilitation facilities and stroke units perceived stigma in the workplace as a barrier of RTW.

DISCUSSION

Severity of the stroke survivors' physical impairments was considered the most common barrier of RTW in this study. This is likely to be due to the fact that severe impairments result in functional limitations which may also reduce the

Table 3. Common perceived enablers of return to work after stroke (n = 36)

Enablers	Yes n (%)
Willingness of the employer to reasonably accommodate the patient at work	12 (33)
Family support	8 (22)
Long hospital stay to allow for intensive rehabilitation	7 (19)
Patient motivation to go back to work	5 (14)
Younger age at the time of having stroke	5 (14)
Multidisciplinary intervention between occupational therapy, physiotherapy and social work	5 (14)
Higher education level	3 (8)
Long duration of employment at the time of having stroke	1 (3)
Breadwinner at the time of having stroke	1 (3)
Ability to communicate	1 (3)

ability to RTW.¹⁵ This perceived barrier is similar to that established by Stergiou-Kita et al. who indicated that a person should be fairly capable of managing most of their self care before they can RTW.¹⁶ However, physical ability of the stroke survivor should be considered in relation to the physical demands of their job.¹³ Therapists in this study did not specifically mention the link between severity of physical impairments and the physical job demands but did indicate that one of the barriers of RTW is lack of skills for less labour intensive work, and conversely that a higher education level is an enabler for RTW. This is similar to earlier research indicating that people with higher levels of education are more likely to do white collar jobs and are thus more likely to RTW after suffering a stroke.^{4,11} However, it is worth noting that physical impairments cannot be considered in isolation when considering RTW. Willingness of the employer to reasonably accommodate the person back at work can also influence the process of RTW.^{5,14,19} In South Africa the state has made available a code of good practice for employers which specifies the role of the employer as an enabler of RTW within the Employment Equity Act.⁹ Physical impairments should not be a barrier if there is sufficient support in the form of increased access to vocational rehabilitation; increased financial resources to purchase assistive devices to facilitate reasonable accommodation; and decreased disincentives created by disability benefits and accessibility of the workplace.²⁰

The second most commonly perceived barrier of RTW in this study was premorbid unemployment which meant that there was no work to which they could return. The unemployment rate in South Africa was 25% during the first quarter of 2011.¹⁷ High unemployment rates may lead to a tendency to have more disability insurance benefits and routine security benefits.¹ This explains why therapists in this study also identified social grants as one of the barriers for RTW. Thus high unemployment rates may lead to a tendency to have more disability insurance benefits than job placements or RTW.

Cognitive problems were also considered to be barriers of RTW for survivors after stroke. Cognitive impairments are a

significant barrier of RTW¹⁸ and decreased cognitive ability is more of a barrier to RTW than physical impairments.¹⁶ Only five of the 36 clinical facilities in this study considered cognitive ability to be a barrier to RTW. The reason why few clinical facilities identified cognitive ability as a possible barrier may be linked to a finding by Holmqvist et al. that most therapists do not use standardised cognitive assessment tools, to avoid subjecting the stroke survivor to too many tests in addition to doing physical tests.⁶

Willingness of the employer to reasonably accommodate the stroke survivor at work was considered as the main

“Physical impairments should not be a barrier if there is . . . increased access to vocational rehabilitation; increased financial resources to purchase assistive devices to facilitate reasonable accommodation; decreased disincentives created by disability benefits and accessibility of the workplace.”



Endurance and strength is required in order to cope in labour intensive work environments

enabler of RTW in this study. This enabler was also identified in various studies which established that employer flexibility is one of the factors that enable successful RTW.^{5,14,19} This enabler was also identified by stroke survivors in a study by Liv et al. in which stroke survivors indicated that willingness by the employer to reorganise the work and to believe in their capacity would enable them to RTW.²¹ Work adaptation requires resources and may affect productivity, thus it becomes difficult to have a balance between being sensitive to employer's needs while accommodating the stroke survivor back at work.¹⁶ Involving the employer by identifying their needs, expectations and potential accommodations in their workplace may help to overcome their lack of willingness to accommodate the stroke survivor back at work.¹³ Therapists in this study mentioned a shortage of work ability assessment equipment and staff shortage as barriers of RTW. This finding is similar to that of Coetzee et al. whose study was done in the Western Cape province of South Africa. They also established that most clinical facilities in the Western Cape do not offer work ability assessments and those that offer these assessments have very long waiting lists as they are overwhelmed with requests from the South African social services agency to do disability grant eligibility assessments.¹¹

“Willingness of the stroke survivor to RTW was also identified as an enabler of RTW . . .”

Inability to drive or use public transport was also identified as a barrier to RTW and this finding is similar to that of Treger et al. who also established that lack of transportation is one of the barriers of RTW.¹ This barrier was echoed by Coetzee et al. and they also made recommendations that the Department of Transport should assist the Department of Labour in order to remove this barrier which impeded participation of people with disabilities.¹¹

Therapists in this study identified workplace stigma as a possible barrier to RTW. This indicates that even if the employer is willing to accommodate a person back to work, there is a need to have support from colleagues as well.¹² Family support was also identified as an enabler of RTW in this study. It was similar to the finding of Holmqvist et al. who reported that some families promote dependence by carrying out the ADLs for stroke survivors even though they could manage themselves and some made decisions for them without asking for their opinion.⁶ Thus the family can in some circumstances make a decision for the person not to RTW even though they would have preferred to RTW.⁶ Willingness of the stroke survivor to RTW was also identified as an enabler of RTW in this study and this is similar to a study by Stergiou-Kita et al. which also indicated patient

willingness to be the most significant predictor of RTW.¹⁶ They established that the goal of RTW must be initiated by the person with an acquired brain injury not the therapist. It is important to always find out why they are not willing to RTW in order to help them overcome self esteem barriers if they are found to be the reason for lack of willingness to RTW.¹⁶

Human immune deficiency virus (HIV) infections and acquired immunodeficiency syndrome (AIDS) were identified as a barrier to RTW. This perception may be based on the following: “Patients with HIV infection who do not have full blown AIDS or pulmonary infection have reduced work capacity, lower aerobic threshold, and poorer aerobic capacity than age matched controls”.²² None of the studies reviewed identified HIV as a barrier to RTW. This is not surprising as most of the RTW studies for stroke survivors were done in developed countries where HIV/AIDS is not a major problem. According to the Joint United Nations Programme on HIV/AIDS 2010 report, 5% of people in the sub-Saharan African have HIV/AIDS whereas in other countries the prevalence is less than 1%.²³ This explains why HIV/AIDS were not considered on the list of barriers to RTW in these studies done in developed countries. However, it should be noted that a person may not be discriminated against because of their HIV status as the South African Employment Equity Act⁹ clearly states that everyone has a right to have a full assessment to establish possible RTW and consideration for possible reasonable accommodation at work.

Therapists working in primary health care facilities perceived stigma in the workplace as a barrier of RTW after stroke whereas those in the hospital based facilities and in the stroke rehabilitation units did not consider this to be a barrier. A possible explanation for this may be based on the fact that when stroke survivors are seen at a primary health care level it is usually long after discharge from the hospital or rehabilitation unit and some of them are back to work already and thus may give therapists feedback about challenges they face at work in terms of stigma as they may have experienced it. Stroke survivors who are still in the hospital or rehabilitation unit are not likely to have returned to work while at this stage of rehabilitation and thus their therapists may not have heard any of their patients complain about the workplace stigma. Hence they do not mention it anywhere in their list of possible barriers. None of the other perceived barriers and enablers had a significant relationship with clinical facility. This could be because the rest of the perceived barriers and enablers mentioned by therapists in this study may not be dependent on stroke survivors' feedback and thus the therapists' perceptions would be similar irrespective of whether a stroke survivor has returned to work or not.

CONCLUSION AND RECOMMENDATIONS

The most commonly perceived barrier of therapists regarding RTW of survivors after stroke is severe physical impairments.

Therapists' most commonly perceived enabler of RTW for stroke survivors is willingness of the employer to reasonably accommodate the person at work. It is thus recommended that: therapists who rehabilitate stroke survivors with less severe physical impairments should consider working with employers to help them understand how and why environmental modifications should be made in order to facilitate RTW; the length of hospital stay for stroke survivors be increased to enable them to attain their maximum functional potential; and that work ability assessments equipment and rehabilitation staff members should be increased in order to increase work readiness assessment services for stroke survivors. Our findings indicate that therapists in Gauteng have similar perceived barriers and enablers of RTW to those reported by investigators in developed countries.

LIMITATIONS

The information gathered about perceived barriers and enablers could have been more enriched if the data collection method was through interviews with appropriate follow-up questions instead of using a self administered questionnaire. The data did not have demographic information and feedback from individual therapists which would have been beneficial in results interpretation

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LESSONS LEARNED

- Stroke survivors need access to full rehabilitation in order to attain their maximum functional capacity.
- The willingness of the employer to reasonably accommodate the stroke survivor at work can be an important enabler of RTW.
- Involving the employer by identifying their needs, expectations and potential accommodations in their workplace may help to overcome their lack of willingness to accommodate the stroke survivor back at work.
- The occupational health team should ensure that physiotherapists or occupational therapists are involved in the rehabilitation of employees who have had a stroke, so that work ability assessments are conducted and work adaptations recommended.

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