

**Exploring barriers and facilitators to return to work for clients with  
spinal cord injuries, in Cape Town, South Africa**

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## **Declaration**

I, the undersigned, hereby declare that the work contained in this assignment is my original work and that I have not previously submitted it, in its entirety or in part, at any university for a degree.

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## **Exploring barriers and facilitators to return to work for clients with spinal cord injuries, in Cape Town, South Africa**

### **Abstract**

**Background:** Spinal cord injury is a catastrophic event, characterised with loss of function below the level of the lesion and increased dependence on family and societal support. The researcher has been working as an Occupational Therapist in a centre for physical rehabilitation of clients with physical impairments, including those with spinal cord injuries, for more than five years. She has observed that only a small percentage of clients with spinal cord injuries that have completed their rehabilitation programme were able to go back to work after the injury.

After examining statistics of the clients seen in the period January-December 2001, when working at a local tertiary Hospital's Work Assessment Unit in February 2014, the researcher was then further motivated to explore barriers and facilitators to return to work for clients with spinal cord injuries. **Hence the aim of this study is to explore barriers and facilitators to return to work for clients with spinal cord injuries.**

**Method:** A qualitative study design was implemented to explore views of clients, managers/supervisors of clients with spinal cord injuries and rehabilitation professionals with regard to barriers and facilitators to return to work of clients with spinal cord injuries. Semi-structured interviews were conducted with 13 participants, including clients with spinal cord injuries, a manager of one of the persons with disabilities participating in the study, and Occupational Therapists involved in physical rehabilitation (including rehabilitation of persons with spinal cord injuries) or vocational rehabilitation (work assessment or return to work). Interview schedules were used to conduct interviews, which were recorded and later analysed thematically.

**Results:** The findings highlighted return-to-work barriers related to inaccessible and non-supportive environment, the employers' attitudes, injury-related issues, the challenging job demands of the previous work as well as transport issues. The facilitators indicated were provision of assistance and support (received from family, friends, church and work); the role of rehabilitation and rehabilitation team members and other role players as well as the necessity of reasonable accommodation in successfully reintegrating persons with spinal cord injuries. Triangulation was done and two common themes emerged amongst the three groups of participants (clients with spinal cord injuries, Occupational Therapists and the Manager) and these indicated the support received by persons with spinal cord injuries and the process of reasonable accommodation which facilitated integration to work.

**Conclusion:** The study findings indicated a need for support for persons with spinal cord injuries, making sure the environment is accessible or conducive for return to work, putting reasonable accommodation measures in place and involvement of all stake holders in the successful reintegration of persons with spinal cord injury to work. These measures could assist all stake holders involved in understanding the needs of persons with spinal cord injury, the responsibility of each of the stakeholders and knowledge about available resources in fostering a smooth transition back to work for spinal cord injury clients.

**Key Words:** Disability, Work, Vocational Rehabilitation, Barriers, Facilitators

## **Die ondersoek van hindernisse en geleenthede/fasiliteerders om terug te keer werk toe vir kliënte met rugmurgbeserings, in Kaapstad, Suid-Afrika**

### **Opsomming**

**Agtergrond:** Rugmurgbesering is 'n katastrofiese geval, gekenmerk aan verlies van funksie onderkant die vlak van die beskadiging en verhoogde afhanklikheid van familie en gemeenskapsondersteuning. Die navorser is meer as vyf jaar werksaam as 'n arbeidsterapeut in 'n sentrum vir fisiese rehabilitasie van kliënte met fisiese beskadiging asook diegene met rugmurgbeserings. Sy het waargeneem dat slegs 'n klein persentasie van kliënte met rugmurgbeserings, wat hulle rehabilitasieprogram voltooi het, in staat was om na die besering terug werk toe te gaan.

Nadat die statistieke van kliënte, wat gedurende Januarie tot Desember 2001 gesien is, tydens haar werk in Februarie 2014 by 'n plaaslike tersiêre hospitaal se werkassesseringseenheid ondersoek is, is die navorser verder gemotiveer om hindernisse en geleenthede/fasiliteerders om terug te keer werk toe vir kliënte met rugmurgbeserings te ondersoek. Die doel van die studie is dus om die hindernisse en geleenthede/fasiliteerders om terug te keer werk vir kliënte met rugmurgbeserings te ondersoek.

**Metode:** 'n Kwalitatiewe navorsingsontwerp is geïmplimenter om die siening van kliënte, bestuurders/toesighouers van kliënte met rugmurgbeserings en rehabilitasie beroepsmense met betrekking tot hindernisse en geleenthede/fasiliteerders van kliënte met rugmurgbeserings wat terugkeer werk toe te ondersoek. Semi-gestruktureerde onderhoude is gevoer met 13 deelnemers wat ingesluit het kliënte met rugmurgbeserings, 'n bestuurder/toesighouer van een van die persone met gestremdhede (wat aan die studie deelneem) en arbeidsterapeute betrokke in fisiese rehabilitasie van persone met rugmurgbeserings (wat rehabilitasie van persone met rugmurgbeserings insluit) of beroepsrehabilitasie

(werkassessering of terugkeer werk toe). Onderhoudskedules is gebruik om die onderhoude te voer, wat aangeteken is en later tematies ontleed is.

**Resulate:** Die bevindinge het aangetoon dat die terugkeer-werktoe hindernisse verband hou met ontoeganklike en nie-ondersteunende omgewings, werkgewers se houdings, die uitdagende eise van die vorige werk sowel as vervoerprobleme. Die geleenthede/fasiliteerders wat aangedui is, was voorsiening van hulp en ondersteuning (deur familie, vriende, die kerk en werk); die rol van rehabilitasie en rehabilitasiespanlede en ander rolspelers asook die noodsaaklikheid van redelike tegemoetkomendheid vir suksesvolle herintegrasie van persone met rugmurgbeserings. Triangulasie is gedoen en twee algemene temas het uitgekam tussen die drie groepe deelnemers (kliënte met rugmurgbeserings, arbeidsterapeute en bestuurders). Die temas het uitgelig die ondersteuning wat persone met rugmurgbeserings ontvang en die proses van redelike tegemoetkomendheid wat integrasie met werk fasiliteer. Hierdie maatstawe kan alle rolspelers wat betrokke is om die behoeftes van persone met rugmurgbeserings te verstaan, die verantwoordelikheid van elke rolspeler en die kennis van beskikbare hulpmiddels om die gladde oorgang te bewerkstellig vir kliënte met rugmurgbeserings wat teruggaan werk toe, assisteer.

**Sleutel Worde:** Gestremdheid, Werk, Werk Rehabilitasie, Hindernisse, Fasiliteerders

## Introduction

Globally, 15% of the population is estimated to be people with disabilities, according to data reported by the World Health Organization (WHO) and the World Bank, (WHO, 2011). The South African census 2011 results reported a national disability prevalence rate of 7.5% (2 870 130 persons with disabilities) with the Western Cape and Gauteng provinces showing the lowest percentage (5%) of persons with disabilities (Statistics SA, 2012).

According to WHO (2013), a significant number (500 000) of people, globally, acquire Spinal Cord Injuries (SCIs) as a result of traumatic causes, which result in impairment, activity limitations and participation restrictions. The incidence of SCI in South Africa and in the world does not seem to be decreasing at all; it is reported to be approximately 76 per million people affected globally and is therefore a significant public health concern (Joseph & Wikmar 2016) not only in South Africa. Globally, causes of SCI include Motor vehicle accidents (44%), violence (24%), falls (22%), and sports (8%); two thirds of sports injuries are from diving and other causes (2%) that might be work related (White & Black 2016). A particularly important aspect of post SCI is participation, especially returning to work related participation. Loss of employment is one of the participation restrictions that affect individuals with SCI as they experience challenges to providing for their basic needs, or resuming previous roles in their homes or society. The WHO (2001) reported that loss of income can lead to loss of financial security, living standard and well-being for persons with disabilities (PWDs).

Concerning etiological differences between males and females, the proportion of traumatic spinal cord injury (TSCI) caused by assault is significantly higher in males (63%) than in females (38%), and most injuries reported occurred in the cervical spine (53.1%). A study done in Cape Town, South Africa, to determine the incidence

and aetiology of TSCI revealed a high incidence in males between the ages of 18 and 29 years as a result of interpersonal violence (assault), and this has huge implications on morbidity and mortality. This appears to be a unique problem in South Africa compared to other African countries and, it is reported that a national study done in South Africa found that violence-induced injuries are the second leading causes of death (Joseph et al. 2015).

Clients with SCIs face many barriers when attempting to return to work after the injury, due to a variety of personal and environmental issues; these range from poor/inaccessible public transport system in South Africa, even though there are means done to minimize that barrier, for example, City of Cape Town through Dial-A-Ride pilot project, the available accessible transport system is accessible only to a few persons with disabilities in comparison to being a necessity to a majority of them. Another reality in South Africa is a challenge of accessing basic health services for both disabled and non-disabled people because of transport and many other political and/or socio-economic issues, hence many people resort to moving away from rural or remote areas to big towns in order to access basic quality health care services, therefore access to rehabilitation services is even worse and only a dream to many persons affected by injury, illness or disability; Most of the clients with spinal cord injuries also experience physical limitations, for example, related to mobility, hand function, and therefore making it impossible to return to previous or alternative work. There other reported reasons for poor return to work, are poor work experience, low levels of education, structural barriers, unfair treatment by employers and loss of employment benefits (Lidal et al. 2007).

Employers also face challenges when one of their employees sustains a SCI which impacts on the affected individual's return to employment. One of the main challenges faced by employers is poor understanding of SCI, the impact of the injury, as well as the poor concept and/or understanding the process of reasonable

accommodation. Reasonable accommodation refers to the necessary and appropriate adaptations done at work to ensure persons with disabilities enjoy equal employment opportunities (Department of Public Service and Administration 2014). Occupational Therapists (OTs), as the vocational rehabilitation practitioners, have the necessary expertise to facilitate reintegration to work of clients affected by injury or disease. Therefore OT's, the clients with SCIs and the managers are part of the team responsible for reintegrating persons with SCI to work.

In low-income countries (LIC), it is reported that 80% to 90% of persons with disabilities of working age are unemployed, whereas in high-income countries (HIC) the figure is between 50% and 70% (DPI/2486 2007). The differences can be attributed to various reasons, ranging from the standard of health care system and treatment of SCIs, to available budgets for appropriate assistive devices and advanced technology that could assist with both community integration and return to work. In low-income countries there is still clear evidence of many barriers related to social, attitudinal and physical barriers, whereas in high-income countries, people with SCIs reintegrate into society and resume ambulation with the help of high technology assistive devices and motorised wheelchairs (Rathore 2010). Most people with disabilities (including those with SCIs) fall in the unemployment category (Statistics SA 2012).

The 2011 Census results indicate a 29.3% unemployment rate, (estimated at 5.6 million people), in South Africa, out of the general population of those who were economically active (estimated at 14.4 million people), consequently unemployment rate is expected to be worse where persons with disabilities are concerned as they experience additional barriers to return to work as a result of personal and environmental barriers. According to data presented by Staff Writer (2016), 2015 projections of unemployment rates in the world that were reported by

unemployment labour groups in 2016, South Africa was highlighted as having the highest unemployment rate out of all the countries reviewed.

According to Ottomanelli and Lind (2009), in studies done in South Africa that examined paid employment, the average rate of any employment after SCI is reported to be approximately 35% and this is similar to what is happening in the Western Cape with an estimated figure of 76% of those people living with SCI who are unemployed. It is reported that according to the 2001 Census the ratio of persons with disabilities who are unemployed is doubled when compared to those who have no disabilities, (ratio of 1:26), within those who were not working an estimated figure of 48% could not find work whereas those who were inactive (i.e. those who chose not to participate in any employment related activity, due to variety of reasons, such as, illness, disability, studying, etc.) are estimated at 83% (Coetzee et al. 2011).

The researcher (an OT), having worked in a centre for rehabilitation of clients with physical disabilities (including those with SCIs), for more than five years, observed that only a small percentage of clients with SCIs were integrated to work after completing their rehabilitation. Subsequently, most of these clients were dependent on state grants and were often unable to assume previous roles in their households and/or in society.

This study aims to explore barriers and facilitators to return to work for clients with SCIs.

### **Research problem:**

The researcher has been motivated to explore this topic after examining statistics, at GSH Work Assessment Unit, of the clients who were seen between January-

December 2013. There were 6 clients diagnosed with SCI's and only one of them went back to work in the Open Labour Market.

When an individual sustains a SCI, the ability to return to work tends to be negatively affected as a result of physically disabling effects. The evidence provided above makes it clear that PWD's are often excluded from participating in employment due to physical, structural and attitudinal barriers.

Hence this study aims to explore barriers and facilitators to return to work, from the perspectives of the participants who are directly and indirectly involved with spinal cord injuries, using explorative descriptive qualitative research method.

### **Motivation for the study**

Disability policy and legislation in South Africa that is aimed at promoting PWDs' participation in the work place, has not been effectively implemented because it suggests that PWDs cannot only be hired on merit and that they also require special treatment within the work environment (Maja et al. 2008). Ned and Ndzwayiba (2017) also shared similar sentiments on their case study findings, carried out at Netcare, looking at complexity of disability inclusion in the workplace. They reported that South Africa has relied mainly on legislative instruments (for example, the Employment Equity policy) to drive disability mainstreaming without preparing the society for modern understanding of the nature of disability oppression. They added that PWDs may still be faced with the same marginalisation they face in society if the work environment is not accepting of development, achievements and success made by PWDs, for example, PWDs are labelled as 'equity candidates' due to negative attitudes and misinformed understanding of disability by colleagues. This explains why employers are continuously struggling to include PWDs within the area of work despite the existence of various policies and legislation. Ned and

Ndzwayiba (2017) recommended an inward shift within employing companies rather than outward compliance with externally forced legislation.

When an individual sustains a SCI, the ability to return to work tends to be negatively affected as a result of physically disabling effects. PWDs are often excluded from participating in employment due to physical, structural and attitudinal barriers. Moss and Marston (2009) reported that many PWDs were well motivated to find work, they were prepared to take some risks and pursue training options or new areas of possible employment, but encounter barriers related to discrimination, lack of support and non-availability of suitable jobs rather than the individual's motivation. In addition to that, informants in another study reported lack of client-centred management, poor disability management procedures and implementation of occupational health and safety policies, poor job matching and communication between stakeholders as well as lack of holistic management as reasons for low employment rates (Soeker, Wegner & Pretorius 2008).

The other factor mentioned was that PWDs do not want to disclose their disability and, therefore, their employers are not able to make provision for reasonable accommodation. PWDs, therefore, do not realise that disclosure could improve their working conditions as they will be reasonably accommodated and this will further promote their participation at work while on the other hand, it will benefit the employer by getting improved Employment Equity Scores. The other reason for low employment or poor retaining of PWDs in the work place was that some of the companies did not understand the concept of reasonable accommodation (Maja et al. 2008). In addition to the above, in the study done by Velcoff, Hernandez and Keys (2010), the informants with disabilities indicated that level of education and familial support also impacted on the return to work.

Loss of income can lead to reduced financial security, living standard and well-being of many PWDs, particularly because many PWDs live in or near poverty (Moss & Marston 2009), thus contributing to the cycle of poverty and disability.

Clients with SCIs receive vocational rehabilitation, which should increase their probability of being absorbed back into the job market, but the statistics received in a tertiary hospital setting, in which the researcher worked, indicated otherwise, hence this study.

OTs are essential rehabilitation team members that facilitate independence in activities of daily living and work through vocational rehabilitation. It is they who are primarily responsible for liaising with the employer in relation to job demands, job analysis, doing functional capacity evaluations, looking at accessibility as well as exploring options of accommodation in order to determine if the person with SCI can return to work (Hocking 2000).

Meaningful occupations, in the form of self-care, leisure or productive activities, form the basis for Occupational Therapy practice; these are used for assessment and intervention in the Occupational Therapy field because evidence has shown that participation in meaningful activities of daily living, including work, promotes a person's well-being (Ikiugu et al. 2015).

Occupation itself is a central concept within occupational science; occupations are defined as purposeful activities, including amongst other things, an ability to adapt to different environments (Hocking 2000). This study, therefore, focused on work as a meaningful occupation that has been positively associated with quality of life and adjustment following SCI, and aimed at exploring factors impacting on reintegration to work for clients with SCIs. It explored views of the clients, as well as those of the

employer and OTs who play an integral role in the rehabilitation process of these clients.

## **Significance of the study**

The study will provide information on barriers and facilitators to return to work for clients living with SCI. There is a gap in research, especially in South Africa, related to the return to work for clients with SCI's and therefore the findings from this study will close the knowledge gap.

Other aspects that the study will contribute to are as follows:

- a) It will provide evidence of clients' experiences on factors that promoted or inhibited their return to work after suffering spinal cord injuries. It will allow them to verbalize the challenges they faced with regards to returning to work as well as acknowledge the efforts y made to retain employment. The information will also provide additional input in order to assist in advocating for their service needs.
- b) Highlight challenges faced by employers during re-integration of PWD's back to work. To also acknowledge the role played by employers and, to highlight factors that promote successful re-integration to work.
- c) Views of the therapists on what are the facilitators and barriers to return to work for clients with spinal cord injuries will be identified.
- d) This information will ultimately contribute on existing information on how to facilitate return to work for clients with SCI's.

## **Literature Review**

### Epidemiology of SCI

Spinal cord injury (SCI); a devastating condition, is a neurological injury resulting in varying degrees of paralysis, sensory loss and sphincter disturbance which are

permanent and irreversible. Due to the lack of SCI registries in LIC, an accurate estimation of the incidence and epidemiological patterns of SCI in the majority of LIC is not possible and, therefore, large national epidemiological surveys are necessary (Rahimi-Movaghar et al. 2013).

A first prospective, population-based study done in Cape Town, South Africa, revealed a high incidence of traumatic spinal cord injury (TSCI) in males, between the ages of 18 and 29 years, mainly due to interpersonal violence (stab wounds, gunshots, etc.). A more recent epidemiological study on TSCI, conducted in Botswana (in Sub-Saharan Africa), reported an incidence of 13 per million population. It is, therefore, difficult to compare the incidence to other countries in Africa due to lack of information concerning disability prevalence and the epidemiology of TSCI. In another study done in the Western Province, South Africa, there was also an inaccurate estimation of the burden of TSCI morbidity, the study setting was limited to one large region and, therefore, the results could not be generalised to other provinces in the country (Joseph et al. 2015).

Middle-income countries (MIC) such as Saudi Arabia and Bulgaria have annual incidence that ranges from 2.1–130.7 per million, compared to the reported incidence of SCI from LIC of 12.1–57.8 cases per million (Rahimi-Movaghar et al. 2013).

#### Spinal Cord Injury management and the effects of the injury on the affected person

SCI is a neurological injury resulting in varying degrees of paralysis and impairments. Some of these impairments are more often permanent and irreversible. It affects more males than females. The major cause of SCI, from a South African perspective, is mainly trauma from gunshot wounds, motor vehicle accidents and falls. SCI causes paralysis of either all four limbs

(in quadriplegia/tetraplegia) or two limbs (in paraplegia). In a complete SCI, both sensory and motor function are absent in the lowest segments of the spinal cord (SC), whereas in incomplete lesions there is some preserved sensation and movement below the lesion. Most neurological return following SCI occurs within the first post-injury year, and continues at a slower pace from six months to two years and, in unusual cases up to five years after the injury (Somers 2001).

Medical and rehabilitative interventions can be provided at any point in the disablement process, i.e., from identifying which impairments lead to functional limitation or increased disability, working with patients and families to minimise impairments and maximise functional capacity, as well as enhancing the patient's ability to function in their home and work environments or to foster an independent attitude. The rehabilitation team also provides appropriate equipment and guidance to promote healthy responses to the disabling conditions (Somers 2001).

The SCI Annual Review Programme offered at Life Rehabilitation Centres provides medical and rehabilitation services to patients with spinal cord injuries that have been discharged from the hospital and additionally offering support to their families; aiming for patients to maintain their physical function and good state of health, in order to reduce complications, and prevent future hospitalisation (Life Rehabilitation Report 2013).

In many instances, paralysis makes it impossible or impractical to return to a job held prior to the injury, and recreational activities enjoyed before the injury may also be impossible. However, through functional training, the person with SCI gains skills required for self-care and mobility in the home and community, these enhancing a person's capacity to perform socially defined roles and tasks such as the ability to work and earn an income (Somers 2001).

### Defining work and its importance

Cook (2006) defines occupation as the ordinary activity with the following features: basic human need, determinants of health, generating income and a source of meaning. Kesho Consulting & Business Solutions (2006) also reported that the contributions of occupations are financial, social, status and self-actualisation.

Work, is a form of occupation, i.e. any activity done involving physical and/or mental components with the aim of being remunerated for. It can be skilled or unskilled employment, formal or informal; contract or fixed employment, etc. Employment enables individuals a high level of dignity and value while providing for their basic needs and that of their families. It allows them to be productive members of society and to be self-sufficient. It provides a forum that has been demonstrated to improve quality of life. It is reported that with employment and being involved in occupation of some kind, there is less reliance on government funds and more contribution to taxes, (Hendricks 2010).

### SCI and rate of return to work

In most high-income countries (HIC), the official unemployment rate for PWDs of working age is at least twice that of those who have no disability (United Nations Department of Public Information 2007).

Employment rates differed between disabled and non-disabled youth (32.9% vs. 13.1%). Lack of job availability and skills were significantly associated with unemployment among non-disabled youth, and for disabled youth, unemployment was additionally associated with social attitudes and poor health (Cramm et al. 2013).

A small-scale survey of employers, carried out in South Africa by Dube (2005), showed that awareness of the right to reasonable accommodation has improved but remained limited. There was also a possibility that the Employment Equity Act (EEA) may have negatively impacted employment for PWDs, but that could not be proved based on limited data and, therefore, further research on the impact of EEA was recommended.

In a study carried out in South Korea on factors that influence employment after SCI, the following was reported: the probability of employment was significantly higher in men than women. The probability of being employed was also higher for individuals older than 45 years at the time of injury than those aged 31–45 years of age, as well as for those injured for longer than 20 years compared to those injured for 1–5 years; and similarly, in people with incomplete tetraplegia compared to those with complete paraplegia. This study provided evidence that injury characteristics are the most important predictors of employment in persons with SCI. Therefore, it is recommended that for persons with lower employment rate, individualised vocational rehabilitation and employment-support systems are required (Kang, Shin & Kim 2014).

In a study done in South Africa, reviewing critical factors related to employment after SCI, the following was reported: A total of 579 articles were found and reviewed to determine the presence of reported employment rates. Results indicated that the average rate of employment after SCI was approximately 35%; the characteristics associated with employment after SCI include demographic variables, injury related factors, employment history, psychosocial issues and disability benefit status. The evidence-based supported employment practices seemed to be the most applicable model for assisting persons with SCI in restoring meaningful employment (Ottomanelli & Lind 2009).

### Barriers to return to work

Krause and Pickelsimer (2008) reported that health factors are related to poorer employment outcomes. Additionally, perceptions of health limitations, for example, pressure ulcers, appear to be more of a substantial barrier to employment than previously believed. These findings suggest that self-perceptions of poor health, and perhaps health itself, ultimately serve as a prominent barrier to employment. It is, therefore, recommended that a discussion of health issues needs to be a greater focus during the rehabilitation process.

Maja et al. (2008) and WHO (2013) reported that PWDs lack experience and skill, and that they do not have the adequate level of qualification needed by the employer, which is attributed to a low number of children with disabilities attending school; this is because most schools are not accessible or adequately resourced to be able to cater for children with disabilities; this creates a huge lack of skills development and therefore a barrier to work for persons with disabilities in general. The opportunity to work can further be restricted by the type of condition, the nature of the work as well as the problem of most companies do not understand the concept of reasonable accommodation. According to Maja et al. (2008), the other barriers to employment of PWDs are reported as follows: discrimination by society, which comprises of the non-disabled, the employers and society's negative attitudes; lack of knowledge and awareness on disability issues by employers and the physical environment.

Soeker, Wegner & Pretorius (2008) further highlighted; in South Africa the main challenge is employers who are not so keen on employing persons with disabilities as they foresee running into huge expenses because the workplace will need to be changed to become disability-friendly; the lack of client-centred management, poor disability management procedures and implementation of occupational health and safety policies; and poor job matching and communication between stakeholders. The other barriers to return to work for PWDs were related to lack of support or

unavailability of suitable jobs rather than individuals' motivation, as well as the reluctance of PWDs to disclose their disability status (Maja et al. 2008; Moss & Marston 2009). All these barriers remain as inhibiting factors to reintegration of PWDs to the area of work.

### Rehabilitation, facilitators and recommendations for successful reintegration to work for PWDs

Rehabilitation is a goal directed process that enables a person with impairment to reach their optimum level of function through the use of assistive devices, compensation for loss of function or other measures, in order to facilitate social adjustment and reintegration. The rehabilitation team members include the medical officer who manages the biological/physical aspects of the condition, the social worker who provides psycho-social intervention to the patient and the family, the Physiotherapist who facilitate the physical readjustment and the OT who facilitates independence in activities of daily living (ADL) and returning to work (Department of Health 2000).

Rehabilitation outcome levels provide a guideline for a generic pathway that can be used in the rehabilitation of all disabilities, by the rehabilitation professionals to ensure a systematic case management from the time the injury or illness has occurred to the final outcome, with the following advantages; to improved goal-setting, assisting with prioritizing, ensuring continuum of care, improving client outcomes, providing clear pathway of care, increased cost effectiveness, improved resource management, providing a way to describe and classify clients as well as more effective time utilization; refer to Appendix E for different outcome levels, (Landrum, Schmidt & McLean 1995). The outcome levels are used in the study to differentiate functional rehabilitation outcomes of participants after being discharged from the hospital or rehabilitation facility.

Ross (2007) reports that despite the permanent physical deficits suffered by clients with SCIs, work preparation is essential to overcome the barriers an individual face when integrating to work following injury, illness or impairment. This process starts with the referral, followed by initial interview and assessment, worksite visit (where necessary, especially for clients living with SCIs), as well as the return to work plan. This process involves OT practitioners who have the necessary expertise to facilitate the integration to work which involves the client and the employer.

It is also recommended that the rehabilitation team should shift their focus more toward those persons with disabilities with low levels of education and to those people who are older when they suffered injuries or disability as these have been reported to be huge barriers to return to work; therefore putting these clients through education programmes or skills development programmes combined with practical work experience and the necessary support will improve their chances of returning to work. Maintaining hope of returning to work and the benefits of counselling are also reported to be almost necessary conditions for return to work (Krause & Pickelsimer 2008; Ramakrishnan et al. 2011).

Velcoff, Hernandez & Keys (2010) suggest that recruitment of rehabilitation professionals from different backgrounds creates a best representation of rehabilitation for clients because having insight and understanding of different socio-economic backgrounds, different religions, and culture could have an impact on the rehabilitation outcomes and subsequently return to work.

Clients' success in rehabilitation is also dependent on availability or lack of support from the family and friends, for example, the person affected by SCI needs physical and emotional support while in the process of adjustment, and they may also require financial support in order to purchase suitable assistive technology, making the necessary adaptations or accessible transport (Velcoff et al. 2010).

Sheltered employment affords the affected person (with disability) with some concessions for below-average productivity while preparing them to reintegrate them to some form of employment in the future. Alternatively, placing these clients in protective workshops, which are safe, disability-friendly environments providing opportunities for skills improvement (Disability Workshop Development Enterprise (DWDE) 2016), or allowing them to explore self-employment, provided they have learned and understand the principles of successful business (Department of Labour 2016; Ross 2007).

Work First is a popular strategy within welfare-to-work programmes in Anglo-Saxon countries, and became prominent in the United States in the early 1990s. The evaluations compared two approaches to welfare to work; one based on finding work as quickly as possible (Work First) and the other based on improving education and skills first and finding a job thereafter. The evaluation found significant and substantial increases in employment and earnings and less poverty at the Work First sites. This positive evaluation led to a spread of this labour market programme concept across the United States and other Anglo-Saxon countries (Bruttel & Sol 2006).

Other return to work strategies used are as follows: appropriate job placement, sensitisation of co-workers and supervisors, on-the-job training, work place modifications and long-term support and follow-up, as well as implementing policies on acquired disabilities (International Labour Organization (ILO) 2002; Hendricks 2010).

An overview of local and international policies and legislation that looks at integrating PWDs including those with SCI to work

There are many policies globally, that facilitate participation of PWDs in mainstream society, however, evidence has shown that there are challenges regarding narrowing the gap between having such policies and actually implementing them. This therefore requires exploring reasons for such challenges through research.

One example of such policies is the Code of Good Practice; its objective is to focus on key aspects on employment of persons with disabilities; such as providing practical guidance on management of disability in the work place to ensure equal opportunities for PWDs; i.e. from giving guidance on recruitment, retaining people at work, to maintaining a safe and conducive work place as well as supporting the employer during the process of reintegrating those PWDs returning back to work and, ensuring that related costs are minimised while the employer contributions are maximised (ILO 2002).

In South Africa, there are a lot of policies that facilitate integration and participation of PWDs in society and some of these policies are explained further in the appendices(see Appendix D for detailed information on the different policies): the Employment Equity Act (EEA), the Integrated National Disability Strategy (INDS), Technical Assistance Guidelines, the Skills Development Act (1998), the Labour Relations Act (1998), the Social Assistance Act and Disability Grants (1992), the Promotion of Equality and Prevention of Unfair Discrimination Act, 2000, Occupational Health and Safety Act and, other related policies. These policies ensure prohibition of unfair discrimination towards employment of PWDs; ensuring equal opportunities for training and employment of PWDs; providing guidelines to be followed when recruiting and how to retain PWDs in the workplace; prevention of injury and maintaining health and safety in the work place as well as providing financial support for those persons affected by injury, illness and disability.

These policies are implemented but not fully effective because of many reasons, one of them being that the work environment (colleagues, managers and physical environment) not being prepared and/ or ready to reintegrate persons with disabilities, (Ned & Ndzwayiba 2017). Another reason is that in South Africa there are no systems in place to adequately monitor and evaluate enforcement/implementation of such policies, what happens is that most companies pay penalties when they are suddenly found to be contravening of such, which is once out of many times they've been doing it and they also learn or find ways to dodge or get away without implementing such policies.

The *United Nations Convention on the Rights of Persons with Disabilities* (UNCRPD) (2006) indicates that government should take measures, to enable persons with disabilities to attain and maintain maximum independence as well as ensuring their inclusion and participation in all aspects of life.

Economic justice is rooted in the provision of equitable economic rights, such as land, finance capital, decent work, capital infrastructure and labour. Realising the economic rights of people empowers them with the means to independently meet their basic human needs with dignity and self-respect. The goal of economic justice is to create opportunities for all people to achieve economic and financial independence so as to live a dignified, productive and creative life. Universal design and access, and reasonable accommodation measures are some of the aspects that need to be addressed in order to remove barriers to access and participation of PWDs (Dlamini 2015).

In South Africa, it is reported that equitable representation of people with disabilities, within the area of work, has not been achieved and their representation is slightly above half a percentage point (0.55%) of the required 2% minimum target. One of the decisions made by Cabinet at the presentation of the 2011/12 annual

report was for Heads of Departments (HODs) to be held accountable for meeting equity targets in their departments during their performance assessment. Although progress towards reaching the employment equity target of 2% is slow, representation of people with disabilities or their employment showed a gradual upward trend year on year (Department of Labour 2016).

#### Brief summary of emerging points from the literature review

SCI results in varying degrees of paralysis and impairments and therefore makes it impractical to return to work or do previously enjoyed meaningful activities. There is general a paucity of evidence with regard to reliable statistics on both the incidence and prevalence of SCI in LICs. Employment of PWDs including those with SCI enables individuals a high level of dignity while providing for their basic needs and that of their families. Rehabilitation enables a person affected by injury to reach their optimum level of function and facilitate social adjustment. It involves medical and rehabilitative interventions that enable the affected person to cope with the disabling condition. Lack of comprehensive health and rehabilitation services reduces options and possibilities of a PWD including those with SCI of reintegration to work. There are many barriers that affect employment of PWDs, including those persons with SCIs.

The opportunity to work can further be restricted by the type of condition, the nature of the work as well as the problem of most companies do not understand the concept of reasonable accommodation. OT practitioners help to facilitate independence in activities of daily living, including work. They use many return-to-work strategies, such as, reasonable accommodation, sensitisation, on-the-job training, etc., in order to facilitate successful return to work. There are also many policies that facilitate participation of PWDs in mainstream society, however, there remains a gap between policy and practice that needs to be explored further through research.

## Methodology

### Aim

The study aimed to explore barriers and facilitators to return to work for clients with spinal cord injuries (SCI).

### Objectives of the study were to:

- explore the perceptions and experiences of clients with SCIs on return to work
- explore from the managers'/supervisors' perspectives factors impacting on return to work for clients with SCIs;
- explore the perceptions and experiences of Occupational Therapists (OTs) on barriers and facilitators to return to work for clients with SCI's
- To explore functional capacity status of clients with SCIs when they were discharged from rehabilitation

### Study setting

The researcher sourced suitable participants in Cape Town from the following facilities:

(a) two academic, tertiary hospitals because, these being two of the biggest hospitals in Southern Africa (Groote Schuur, with 893 beds, is located in Observatory, opened its doors in 1938 and is affiliated to University of Cape Town; Tygerberg hospital which is situated in Parow and was officially opened in 1976, and has 1384 beds); Academic hospitals were chosen initially for the study in order to have access to adequate information for a variety of clients with SCI's, because that is where most of them receive their inpatient and outpatient rehabilitation and/or medical intervention. Rehabilitation and vocational rehabilitation in South Africa is mostly based in health institutions.

(b) Siyaya Skills Institute, a Level 1 B-BBEE Company. It has a disability management programme to give the necessary support to companies in facilitating the creation of an accommodating and accessible work environment for different

types of disabilities; it enables them to meet their Employment Equity targets, providing Learnerships and future employment for persons with disabilities. Siyaya's process is designed to facilitate the employment of PWDs through a coordinated effort involving the employer, the candidates with disabilities as well as input from the Disabled Peoples organizations; incorporating different strategies that ensure that a suitable job placement is done and the necessary adaptations at work are in place; in order to promote successful reintegration to work; Siyaya also facilitates appropriate skills training programmes through learnerships while taking into account the individual's (PWD) needs (Siyaya Skills Institute 2015);

(c) Usebenza is a Work Assessment Unit from the University of Stellenbosch's Medicine and Health Science Faculty, in the Occupational Therapy Department and,

(d) 'Back ToWork', which is a privately owned (by an Occupational Therapist) vocational rehabilitation unit, that focuses on early intervention and facilitating reintegration of PWDs to work.

### Study design

This study used an exploratory and descriptive qualitative approach method. It is based on social science; aimed to get participants' real-life experiences, their raw emotions and/or their behaviours as they react in normal everyday situations, (Creswell 2009). It examines data for patterns, common themes and relationship between phenomena, returning to the data to test these emerging theories so that the research is an on-going cyclical process until understanding is achieved (Hammell & Carpenter 2000), while aiming to recognise that the informant has the knowledge and expertise of the phenomenon of the study, where the researchers are often the learners, not the experts (Cook et al. 2001). This method is best suited for this particular study because it gives comprehensive participants' views based on their lived experiences.

According to Creswell (2009), qualitative research is often conducted in the field, allowing direct interaction with the people being studied in their context; following are the characteristics common to several qualitative methods: Researchers collect data themselves by examining documents, observing behavior or interviewing participants. Multiple sources of data are preferred over a single source; this requires the researcher to review all data, make sense of it and organize it into categories or themes that cut across all sources. Researchers often build their patterns, categories and themes from the bottom up (inductive analysis). The focus is on learning the meaning participants hold rather than the meaning brought in by the researcher. The research is often an emergent, shifting process in response to the field. The qualitative researcher interprets what is seen, heard and understood. This must be seen in light of the researcher's background, history, context and prior understanding. The researcher tries to develop a complex picture of the problem or issue by reporting multiple perspectives and identifying multiple factors involved.

#### Study sample and sampling of participants and inclusion and exclusion criteria

The study sample constituted of approximately 25 participants but only 13 took part in the study and the first interview was 24:45 minutes' long; consisting of six clients with SCIs, six OTs, and one manager currently supervising one of the clients participating in the study. The other 12 changed their minds and voluntarily withdrew due to different reasons.

The participants' home languages represent all 3 most popular languages spoken in the Western Cape Province which was also part of the inclusion criteria.

#### **(a) Clients with Spinal Cord Injuries**

The inclusion criteria for this study entailed South Africans, both males and females, who sustained traumatic SCI during the period 2010–2014, those that were employed at the time of injury, within the ages of 18–49 years, and only those who

have completed their rehabilitation; as well as clients who were employed and unemployed after the injury.

The exclusion criteria were as follows: non- South Africa citizens, clients with degenerative spine conditions or inflammation, sport related SCI, clients younger than 18 as well as those aged 50 years and above at the time of injury.

The researcher examined the manual attendance register in one of the two academic hospitals (after permission was granted) in order to find suitable clients, i.e., those meeting the inclusion criteria: a confirmed diagnosis of SCI due to traumatic causes, injuries sustained between the period January 2010 to December 2014, clients who were employed at the time of the injury and age, were selected. The researcher went through reports of patients (with SCIs) assessed to read their Functional Capacity Evaluation reports in order to ensure that they met the inclusion criteria, to determine their diagnoses, to get report on their functional capacity status as well as their ability to return to work. She chose any clients that she has never had consultation with during their rehabilitation (either for work assessment and/or intervention) but who met the criteria. However, there were no suitable clients for the study in the second academic hospital.

The researcher then explored facilities outside of government in order to source more clients for the study project; sending study information and inclusion criteria to Stellenbosch University's Occupational Therapy department, Siyaya Skills Institute and OTs in the private rehabilitation units. When approval to do the study was granted, she was given details of suitable clients.

On receiving that information, the researcher contacted the clients about the study and/or sent them information electronically so that they could read the information leaflet. The researcher then followed up with the clients to get feedback and in order

to determine if they were interested in participating or not. The researcher also confirmed details of the injury and employment at the time of the injury.

If a participant did not meet the criteria, the Researcher thanked that person and explained that he/she had not met the criteria for participating in the study.

For those that met the criteria the researcher explained the research process, i.e., guiding questions, interviews being recorded, confidentiality, etc. She then arranged time to meet with them to do interviews when they indicated their interest to participate. Then an appointment was made to conduct an interview at the client's place of choice and convenience. Most of the clients (four out of six) were sourced from outside the government institution.

After consent was received from the participant verbally and/or by letting them sign the consent form, the interviews were carried out (refer to Appendix C for a copy of the consent form). After finishing the interview, the researcher then moved on to the next participant on the list, going through the same process.

### **(b) Occupational Therapists**

The OTs were included as study participants as they have the necessary expertise to facilitate independence in activities of daily living (self-care, leisure and productivity), therefore playing an integral role in facilitating the reintegration of PWDs, including those living with SCI, to work.

OTs' inclusion criteria were those OTs who worked in the rehabilitation and/or vocational rehabilitation of clients with SCIs and not necessary required of them to have treated any of the clients participating in the study, but OT's who were doing community service and those who were not permanently employed were not allowed to participate in the study project.

Information about the study was sent to the Research committees and HODs at the two academic health facilities (Tygerberg hospital and Groote Schuur hospital); to the University of Stellenbosch's Occupational Therapy department as well as to the managers in the private rehabilitation facilities and to Siyaya Skills Institute. When giving information about the study the strict inclusion criterion was included. A request for OTs who were working there for at least six months, those who had exposure to working with SCIs and/or having worked in work assessment or return to work. The OTs were not required to have treated any of the SCI clients participating in the study.

After receiving permission from the different facilities to do the study the facility managers at the health facilities gave names of OTs who would be suitable candidates for the study.

The researcher used purposive sampling to source suitable participants for the study in order to find those participants that met the inclusion criteria. This implies that the researcher selected informants who carry valuable information with regard to the research question to aid the researcher in developing insights into the area being researched and answer the research question (Cook et al. 2001).

The OTs were contacted using contact details that were provided, i.e., cell phone numbers and/or emails, in order to confirm if they met the inclusion criteria and to give them information about the study project. The researcher then made an appointment with the OTs to arrange for the interviews at a convenient time and place if they met all of the above. A consent form was signed by OTs before the interviews took place.

A total of six OTs participated in the study and interviews were carried out with them.

### **(c) Supervisors/managers of PWDs**

The inclusion criterium was as follows: managers or supervisors of clients participated in the study project (previous or current place of employment); and exclusion criterium included those managers or supervisors who were or did not directly supervise the clients at work.

The researcher requested permission from the clients (with SCIs) to interview their manager/supervisor at their previous or current place of work, in order to ask questions related to the study project, and also requested contact details when the clients agreed. These are the clients (with SCIs) who took part in the study project. The researcher ensured that she had at least two contact persons' details in the event that one person became unavailable.

The manager/supervisor was contacted and given information about the study, the data collection process and confidentiality and study ethics issues. After indicating willingness to participate, an appointment was made to do the interview at the time and place of their convenience.

Consent was received verbally and/or by signing of the consent form before interviews were carried out.

For the three clients that are back at work, one of the managers declined to participate, one manager was interviewed for the pilot study and therefore only one participated in the actual research project.

Those managers that were not interested in participating were thanked by the researcher for their time. It must be noted that for those clients that were not back at

work, most of the supervisors did not respond to the information sent and some declined to participate.

### Method of data collection

Semi-structured interviews were used to collect data from participants. Semi-structured interview is described as a relatively unstructured interview that is utilised to capture informants' perspectives on topics or issues relevant in their lives. It allows informants to talk in their own terms to truly understand how they view and experience the world. They are more adaptable and are likely to produce more than what is expected from the participants (Leedy & Ormrod 2005). A semi-structured interview uses open-ended questions to facilitate the interview while allowing the participants to relate their experiences objectively without any influence from the researcher. This type of interview allows a participant a freedom of expression when giving account of their experiences, and usually new information and themes develop and, these are further explored by the researcher (Cook et al. 2001).

The open-ended nature of the questions posed during these interviews provides opportunities for both interviewer and interviewee to discuss some topics in more detail. If the interviewee has difficulty answering a question or provides only a brief response, the interviewer can use cues or prompts to encourage the interviewee to consider the question further. In a semi structured interview, the interviewer also has the freedom to probe the interviewee to elaborate on an original response or to follow a line of inquiry introduced by the interviewee, (Hancock, Windridge & Ockleford 2007).

The interview guides were translated by health professionals who use that particular language as their first/home language, i.e. Afrikaans and isiXhosa speaking, as they understood both how the questions should be asked, especially to accommodate the

non-medical participants as well as to ensure that the interview questions were accurate and reliable.

The interview guides were used to extract relevant information; these were translated from English to Afrikaans and isiXhosa (refer to Appendices B1-B3 for interview guides). Interviews were recorded to ensure accurate capturing of participants' narratives.

Data were documented using alpha-numeric codes for each participant and these are used in the verbatim for presentation of the results. The following abbreviations are used at the end of the codes, for example, PWD (meaning the participant is a person living with spinal cord injury; OT (used for Occupational Therapists' verbatim) and, EMP (for the manager).

### Pilot study

Pilot testing helps with practical issues, to gauge the amount of time the interview is likely to take, and it enables the interviewer to become increasingly comfortable with conducting qualitative interviews. It also tests relevance of the questions or if the informants understand the language used (Hamell & Carpenter 2000).

A total of four pilot study participants were used to test the data collection instruments, i.e., the interview guides used for different participants as well as recording of the interviews with a tape recorder.

The interview guides were piloted with those participants that were not included in the study, i.e., they included an OT who is working with SCI and return to work; two persons with SCIs and a manager of one the persons with disabilities (SCI). Changes in the interview guides were made accordingly before actual study participants' interviews were carried out. The changes made were how questions

were phrased to avoid ambiguity and to be user-friendly as the PWDs had no medical background.

This process was carried out in order to ensure that the instrument fulfilled the purpose it was meant for; it guided the discussion as expected as well as checking for rigor.

The researcher recorded the pilot study interviews, transcribing them word for word. This was to ensure that the participants' responses were documented accurately and objectively.

The data collected from the pilot study were analysed manually, coding done, and themes were identified in preparation for the actual analysis of results.

The researcher realised that it would be impossible to do focus group with OTs (as indicated in the study proposal) as the study setting had changed and, therefore, she had to source OTs from different facilities which could have been difficult to arrange due to operational demands and facilities' different daily programmes. So the researcher had to do individual interviews with OTs as well.

#### Approval of the research proposal

The research project proposal got approval from the University of Stellenbosch's Research Ethics committee and the ethics reference number is S14/05/118 (refer to Appendices A1-A2).

#### Permission

The research project was registered on the National Health Research Database and the permission to do the study was granted by the Western Cape Department of Health and the different health facilities involved was obtained before starting with

data collection, for the period 15/04/2016-14/04/2017 (Refer to Appendices A3-A4 for letters of permission).

### Ethical considerations

#### **Beneficence and non-maleficence**

The informants were informed and given a choice to pull out of the study as and when they wish without any explanation given to the Researcher.

There were no issues related to participants requiring further intervention during the course of the study. The intervention indicated above, such as, appropriate medical/psychological treatment deemed necessary for the participant, after a proper assessment is done, i.e. counselling, support group or medication, etc., required as a result of talking about their injury or the impact it has in their lives and that of their families.

#### **Informed consent**

Informants gave verbal and written consent after receiving adequate information about the study, i.e., after all their questions were answered to their satisfaction, regarding the study project.

For those who did not sign the consent forms, verbal consent was received, and/or agreeing to be interviewed was taken as consent to participate (refer to Appendices C1-C3 for the copies of the informed consent forms).

#### **Anonymity**

Throughout the study project, informants' particulars were kept confidential and only the researcher had access to and/or was able to identify the informants.

Participants were allocated reference numbers, consisting of special alpha-numerals to identify different participants while maintaining their privacy and confidentiality.

These are only known to the researcher as to what they stand for, in order to be able to refer to the data later on during the course of the study project.

Interviews took place at the informant's choice of place and time, e.g., at their home or their workplace. This aided in keeping the informant's identity confidential as indicated above; they maintained their anonymity while sharing information publicly.

Privacy and confidentiality was maintained when interviews were carried out and the clients had a choice if they wanted someone else to be present or not when interviews were carried out.

### **Autonomy**

The researcher consistently maintained respect for participants throughout when engaging with them. They were allowed to own their opinions and views without any influence from the researcher, this was done in order to maintain objectivity of the information they shared. The researcher always ensured a non-judgmental atmosphere during the project and that all the necessary information related to the study project was shared with the participants.

### **Justice**

The researcher ensured fairness to all informants and treated each informant equally. Same information was given to all informants in the same manner, i.e. before, during and after the research process.

### **Trustworthiness**

Trustworthiness was gained when the researcher showed that data was ethically and mindfully collected, verified from participants whether it was accurate, analysed;

results were further verified from participants with regard to the accuracy of the data analysis, (Carlson 2010).

### Data collection process

#### **(a) Clients with Spinal Cord Injuries**

The participants were informed that the interviews will be recorded and of the reasons for such. A dicta tape was used to record interviews and this was kept safely by the researcher. A Vodacom Tablet was used as a back-up to record interviews should the batteries of the dicta tape run out while the interview was in progress.

Open-ended questions were asked and the participants were asked to clarify certain phenomenon to ensure that they clearly expressed their views, i.e., during the interviews and when follow-up phone calls were made.

The interviews were conducted in English (for English and Afrikaans speaking participants) and in isiXhosa for Xhosa speaking participants. The participants were informed that they could answer in whatever language they felt comfortable with in order to relate their information freely and accurately, so the participants used a mixture of English, Afrikaans and isiXhosa.

The researcher requested information about the job title of the client (with SCI) participating in the study, from the clients themselves and from their manager/supervisor as well as a summary of clients' duties in order to determine job demands of previous or current work.

Information about the clients' rehabilitation outcome and/or functional status on discharge was sourced first from persons with disabilities themselves during the interviews (asking what activities of daily living they were able to do on discharge from rehabilitation) and, later from the health/rehabilitation facilities where they

were treated and/or from the rehabilitation professionals who were currently managing them.

This information was used to confirm diagnoses as well as to get discharge summaries to determine functional outcome on discharge from the hospital in order to help in answering the research question.

### **(b) OTs**

Interviews were conducted in English with open-ended questions asked, and the participants were asked to clarify certain phenomenon to ensure that the researcher understood the views of the participant, i.e., during and after the interviews were carried out and interviews recorded on the dicta tape.

A Vodacom Tablet was also used as a back-up to record interviews.

### **(c) The Manager**

The manager was interviewed in English and was allowed to use English and/or isiXhosa or Afrikaans to answer the questions; open-ended questions were asked, and the participant was asked to clarify certain phenomenon to ensure that the researcher understood their views, i.e., during and after the interviews.

Again, a dicta tape was used to record interviews and, a Tablet was used as a back-up to record interviews.

### Data collection procedure

- 1) Identifying and accessing informants through the contact details provided. This was done after ethical approval from the Research Ethics committee was received and, different facilities participating gave permission to do the study.
- 2) Organising and confirming interviews (time and venue) telephonically or via email. The venue was confirmed between informant and researcher as most convenient for the participant.

- 3) After consent was received the interviews were conducted and recorded with all groups of participants.
- 4) Ensuring rigor: After transcribing of data from word to word, the researcher did initial extraction of themes. The informants were contacted telephonically to determine if the themes correctly interpreted the informant's narratives.
- 5) A follow-up telephone call or a session was scheduled, when necessary, when the researcher needed to explore answers further.
- 6) Repeated process (Step 1-4) per informant and, Step 5 when necessary.

### Data management

- 1) Each informant was assigned a code (alpha-numerals, e.g., SN01-OT) and they were not identified by their names.
- 2) Data was transcribed by the researcher, after the interview was done and stored under those specific codes.
- 3) Transcribed data kept for each code, a hard copy printed and stored electronically in the computer at home and at work and in the external hard drive at home.
- 4) Transcribing of data from the tapes; analysis of notes and observations was done (by the researcher) into different themes. A phrase from one of the participant's verbatim was used to label/name a category. For each question asked, all informants' verbatim were put under that question.
- 5) Phrases/recurring words/ ideas, from different participants' verbatim that have similar meaning were put under that one category thereby having different categories of answers for each question asked.
- 6) The researcher then looked at all the categories to check if there was any link between categories.
- 7) All information and data were kept on the researcher's computers at home and at work; these can only be opened using passwords that only the researcher knows.

8) An external hard drive was used to store backup of data and information at home as well as hard copies of all notes and documents of the informants. The information was kept safely in a secret place known only to the researcher.

### Data analysis process

The focus is on learning the meaning participants hold rather than the meaning brought in by the researcher. The qualitative researcher interprets what is seen, heard and understood, (Creswell 2009; <http://www.american.edu/provost/ctrl/researchsupportgroup.cfm>).

The data analysis for this study was done manually, by the researcher as follows:

#### 1) Transcribing and reading:

The recorded tapes were transcribed by the researcher word for word and transcripts were read afterwards by the researcher to ensure that verbatim was transcribed as is from the participants.

#### 2) Initial coding:

The transcripts were then printed as hard copies, initial coding, with colour pens and, exploratory comments were written on the margins of the informants' transcripts. The participants were then contacted to check and verify information from the tapes when questions arose and when data analysis was done.

#### 3) Developing emergent themes:

This process looked at extracting similar words, phrases and patterns from the exploratory notes made previously in Step 2 after exploring the data numerous times; these were developed into themes and sub-themes, with the aim of answering the research question.

Themes and sub-themes were drawn from the findings from each of the three sample groups.

#### 4) Searching for connections across emerging themes:

The researcher then used a map to establish connection across the different themes. The main themes were compiled in order to identify the informant's lived experience.

5) Moving to the next participant:

The process was repeated with each informant. It is important to note that the researcher began the analysis process for each participant as though it was the first time to make sure that there is no influence from the previous data already received.

6) Looking for patterns across all participants:

Looking at all the informants' data and then use of a table to group similar themes together was done.

7) Triangulation:

The researcher's triangulation was used in the study project. She identified common themes amongst the three groups (clients with SCIs, OTs and the Manager).

8) Available academic literature to support themes was sourced for discussion and presentation of the study results.

## **Findings**

### **1. Introduction**

The study aimed to explore barriers and facilitators to return to work for clients with SCIs. The study objectives were to establish views of clients with SCIs, as well as those of OTs and supervisors/managers of PWDs on the barriers and facilitators to return to work for clients with SCI.

The study sample consisted of three groups of participants, i.e., six clients with SCIs, that is presented in the results as group 1; group 2 consists of eight OTs that are involved in the rehabilitation of clients with SCIs and, group 3, a manager of one of the clients with SCI.

Table 1

*Demographics of the participants*

<b>Group 1: Clients with Spinal Cord Injuries</b>					
<b>Participant codes</b>	<b>Age/age bracket</b>	<b>Level of education</b>	<b>Gender</b>	<b>Work done prior</b>	<b>Rehabilitation outcome level on discharge, (Landrum et al. 1995)</b>
EL01-PWD	33	Grade 12	Male	Welder	4
SMP02-PWD	29	Grade 11	Male	Broom-assembler	4
RC03-PWD	46	Grade 8	Male	Street sweeper	4
BMB04-PWD	31	Grade 10	Male	Manual labourer	4
QC05-PWD	49	Grade 12	Male	Sector Manager at SAPS	5
RE07-PWD	35	Grade 12	Male	Foreman/Assistant Manager	4
Refer to Appendix E for detailed explanation of Landrum's rehabilitation outcome levels.					
<b>Group 2: Occupational Therapists</b>					
<b>Participant codes</b>	<b>Age/age bracket</b>	<b>Gender</b>	<b>Years of experience</b>	<b>Sector</b>	
LS06-OT	40	Female	14	Academia	
AN08-OT	30	Female	7	Government	

IR10-OT	29	Female	4	Government	
IG11-OT	32	Female	9	Government	
AM12-OT	35-40	Female	14	Private	
RW13-OT	45-50	Female	23	Government	
<b>Group 3: The Manager</b>					
<b>Participant code</b>	<b>Age</b>	<b>Education</b>	<b>Years of experience</b>	<b>Sector</b>	<b>Job title</b>
ZM09-EMPL	60	Grade 12	27 years	Government	Commander

Findings will be presented according to the three sample groups. Alpha-numeric codes are used for all participants' verbatim in the three sample groups. Themes and sub-themes emerged from within the case and across case participant data. There were eight themes that emerged from the interviews; three themes from group 1(PWDs); two themes from group 2 (OTs) and three themes from group 3 (the Manager). These eight themes are supported by sub-themes and verbatim from participants.

Three sets of participants' groups were used to see what common facilitators and barriers were identified across the three groups and then combining them into different themes and sub-themes. This analysis was done manually.

Below is the presentation of the findings with the following abbreviations used at the end of the codes, for example, 'PWD' represents the verbatim of the persons with spinal cord injury; 'OT' for Occupational Therapists, and 'EMP' represents the verbatim of the manager. The numbers in the codes represents the sequence in

which the interviews were done, (i.e. 01, indicating that the participant was interviewed first).

## 2. Emerging themes

### **Group 1: Clients with spinal cord injuries**

The analysis of the interviews done with clients with SCIs led to the identification of two main themes which were: the important role of the support received; the limitations and challenges experienced as a result of SCI.

#### Theme 1: The important role played by the support received: 'Yes they are all helping me'

This theme highlights views of persons with SCIs on the assistance and support received from family, friends, and church as well as from work. This support also included skills training and reasonable accommodations, as explained in Sub-theme 1.2.

##### Sub-theme 1.1: Assistance and support received from family, friends, church and work

All three participants who were successfully reintegrated to work highlighted the role played by family, friends, and work, in facilitating reintegration to work. Practical examples included assistance with self-care activities provided by family members, emotional support, job offers from friends with accommodation provided. In the family the support received was mainly from their partners, parents and children. The partners assumed a role of a primary caregiver, i.e., assisting with self-care activities, such as bathing and dressing, and visiting the client while in hospital. What was also reported was the role played by church in providing support, such as, accompanying their family members when visiting them in hospital; the quotes below from some of the participants explain.

EL01-PWD related as follows regarding support received from his family:

*'I get full support from my mom and also, they help me if I want something maan. If I had the accident, the bladder I have to clean up cause my house isn't wheelchair-friendly so I have to wash me in bed.'*

And, RC03-PWD commented as follows regarding his colleagues:

*'But I get my support, they do actually help me a lot and that means a lot. Yes they are helping me.'*

Another participant, QC05-PWD, said the following regarding the support he received at work:

*'At work it's only the support group that we have. It's like Health and wellness. We are on support group, we usually speak to and we have a chat group, on the phone, maybe if we have challenges, we can just support the guys with assistance and, if they can't help you then they told you, maybe ask for that guy or that guy. It's like support group, all people going through challenges we contact them. And then yearly we got like the function, you know, the 3rd of December. And then we can meet new people, new friends and stuff like that.'*

And he also added:

*'Oh it's like we are a like a support group, in the police, we attend quarterly meetings in Cape Town. We also have like sometimes projects and so, like supporting the new guys who is coming to the system maybe they got challenges also with the wheelchairs or even if it's for wheelchairs or even just talk or any challenges they have. We like to assist or maybe go and visit them while they still in hospital, come and talk to them.'*

QC05-PWD also highlighted the role played by his Church with regards to providing him with spiritual and emotional support as well as supporting his family during the difficult time, as indicated below, when he said:

*'Ok, I think my Church did do it really. They supported me very well, and then my wife and the kids. They assisting my wife and kids with, like support, you know, just to be there for them. And sometimes they invited them over to go and have meals with them and stuff. And just to be there, and even when to transport them, from here to the hospital, because that time I was the only driver. They didn't have any, they can't drive anyone of them, they were still small. That type of support, ja.'*

#### Sub-theme 1.2: Skills training and reasonable accommodations

This sub-theme gives an overview of the different types of accommodations provided at work post the injury as related by the participants below.

RE07-PWD reported as follows:

*'I was fortunate that I, because of JP, offering me the job. The friend, ja, so I was fortunate. He accommodated me and then he moved me over and said here, he needs a Procurement officer, so let me fill in that job for the time-being.'*

Another participant, QC05-PWD, said:

*'Ja, and it was very small and that was the building that the police hired by a private company. So they can't just do their own thing. That's why I make a transfer to Paarl, this side, the building was more accessible. I can go with my wheelchair and the toilet is on the ground floor, everything on the ground floor.'*

And he added:

*'At work they busy with under-roof parking they busy to finish it because where my vehicle is standing they must put like a net, it's like a 100% water-proof net so that the vehicle can be on the under-roof when it's raining. I did speak to Management, this people is busy with it so I told them they must not wait for next winter. Even in summer also because when it's hot you get heat by the sun very quickly when you exit from the vehicle to the chair.'*

And another participant, RC03-PWD, also shared the following regarding reasonable accommodation:

*'They (referring to his colleagues) actually helping me when, there's miskien like. The tool you use miskien, sledge-jammer, they take it off the rails. I actually only sitting. I can't lift mos heavy stuff up. Actually, they take the stuff off the rail and they put it back. They help me cleaning the workshop also. Ja, they help me a lot. They do a lot for me.'*

He added:

*'She (referring to his Manager) is alright. Actually, she is talking about. Actually she put me now on the computer course. Now, I'm waiting for level 1. I do my ranger training also, field ranger training. They want to teach me actually for the workshop to put everything on the computer.'*

Another participant, RE06-PWD, shared a slightly different reason for the accommodation provided as follows:

*'I don't know yet. Currently they accommodated me into the store, Rigging Store. I don't know how, they only accommodated me because they forced to they didn't do their work, so they've given me the contract, you see, I already signed. So, they were*

*bit moelik because they couldn't have given me if they did their job but because of their negligence, paper work was signed and stuff. I keep them to that.'*

Theme 2: The limitations and challenges experienced as a result of Spinal cord injury: 'They couldn't keep me there anymore'

This theme summarises a variety of reasons that the participants shared in relation to not being able to go back to work. It was due to the nature and/or severity of the injury as well as job demands. The participants, with SCIs, went through the process of exploring means to return to work whether in an accommodated position or alternative work, however, some of them had no choice but to leave the job market as a result of not finding a suitable job.

Sub-theme 2.1: Job demands

The participants, with SCIs, mentioned that they could not return to work because of the type of work they were doing before the injury. The nature of the work was physically demanding and not suitable for a person in a wheelchair or with physical and/or mobility impairments:

EL01-PWD reported as follows:

*'Because the type of work we do there. You see, we go in tanks, you get under tanks, we go to site jobs and I can't go, you see. How will I get in a tank and, under a tank, on site you have to be flexible, that's why they couldn't keep me there anymore?'*

The other participant, SMP02-PWD, shared the following regarding the type of work he did:

*'At work I used to lift heavy boxes. Everyone had to help loading the truck that is going to deliver.'*

And he went on to add the following regarding the outcome of the OT's work assessment:

*'I was attending OT at the assessment to return to work, cause I wanted to return to work but they said I can't go back. She said I must go back to school. We will find you a school to study because you are still young. Then they sent me for a learnership.'*

Another participant, BMB04-PWD, said the following regarding the work he did prior to the injury and impact of injury on his function:

*'Ja, its heavy physical work, cause the Doctor said I can't go back there because I'm not supposed to do heavy physical work, with my back. The worse thing is to bend, bending for a long time. I cannot lift weights over 9kg and the work there is over 9kg. My leg as well is also affected, it gets cold most of the time, the nerves were not working and it hasn't come right. No, I can't do heavy physical work.'*

#### Sub-theme 2.2: No support received from work

Some of the participants reported that they did not receive any kind of support whatsoever from their work after they had the injury; they were either dismissed, the contract was terminated and/or no financial support provided.

One of the participants, RE07-PWD, indicated that he was offered a very low paying salary which he declined as he felt he was being exploited as he was doing a lot more compared to the salary he was offered, which he indicated was very heart-breaking for him as he had done a lot for the same company before the injury. He said:

*'They don't want me to work there. They offered me a clerical job at R16 an hour when I was earning that much to that little it was a big jump, it must still cover my fuel cost from Kuilsriver to Paarl, where I was getting a fuel allowance and the company vehicle and they took all that away from me, after they wanted me to come back. I was heartbroken. I've put in a lot of hours in there. I've put my heart into it because I was growing in the company and I could prove my way. Ja, but the minute the accident happened, ja, they felt they didn't need to support me, I felt otherwise.'*

He went on to share the following experience and his emotions:

*'Yet, and they were older than me and I was young. So, they didn't like me. So, all of that contributed to when the accident happened, it was all, anti-me. I had Lizette (the OT) assist me there. They don't want me to work there. It was very frustrating. I was heart-broken; I've put lot of hours in there.'*

Another participant, BMB04-PWD, also related his experience as follows:

*'At work there is no help yet. They gave me salary for that week. They said they will comeback but they never did till now. They said they sent my things to Labour and they said other things I must expect from RAF. They never came back.'*

RE07-PWD also shared a similar experience:

*'They haven't paid me, they stopped paying money, salaries, they said WCA is supposed to cover all that. The whole complicated issue with the whole WCA story, and then up until today I haven't received a cent from anyone. I eventually sold my car so I could get some money.'*

### Theme 3: Motivation to work (intrinsic versus extrinsic motivation)

This theme highlights the different reasons that motivated people to return to work that was shared by participants, those relating to intrinsic and extrinsic motivation, such as, returning to work to earn an income in order for them and their families to survive, as well as taking initiative in the process of ensuring that return to work is successful.

The Sub-theme and verbatim included for this theme are as follows:

#### *Sub-theme 3.1: Extrinsic vs intrinsic motivation, 'It was better than not having an income'*

One of the participants, RE07-PWD, mentioned that he had to take any job, even a low paying job in order to survive because:

He had already sold his car and was afraid he was going to lose his house as well. He hoped that with improvement of his function, he will be able to do more and therefore get paid more. This he described as resulting in conflicting feelings, i.e., being grateful for the job opportunity and for being given a chance to work but knowing that he could do more was very frustrating for him.

Another participant, RC03-PWD, was offered medical boarding but declined due to financial obligations, i.e., bond repayments, supporting his family (with kids at school, at tertiary, etc.). He felt he needed to stay in the job market in order to be able to take care of his family. He shared his experience as follows:

*'Actually, they want to board me and I said no. I can't go on board because I have a bond to pay. Actually, who is gonna pay my bond? What about my family? I have children at school; I have a young daughter at a primary school.'*

Whereas QC05-PWD seemed to have a strong intrinsic motivation, as according to QC05-PWD's employer representative who assisted him in facilitating reintegration to work commented as follows:

*'This man wants to work even if he is in a wheelchair, compared to other able-bodied people who are lazy to work.'*

This highlights the motivation the participant showed and the initiative he took in wanting to return to work.

## **Group 2: Occupational Therapists**

The second group of participants consisted of six OTs. There were two main themes that came out from this group, and they were related to the necessity of good, client-centred rehabilitation as well as the challenges with accessibility for persons with SCIs.

Theme 4: The important role played by good rehabilitation: 'I think, from my experience, it's obviously good rehabilitation initially'

This theme encompasses the importance of good rehabilitation, that is client-centred; what is required to ensure successful integration to work for persons with SCIs, i.e., the need for follow-up of clients with SCIs; the main role players in the rehabilitation of clients with SCIs with OTs having an essential role, as well as the measures that need to be put in place for reasonable accommodation, to ensure successful integration to work for persons with SCIs.

Sub-theme 4.1: Characteristics of good rehabilitation to ensure successful return to work

This sub-theme highlighted the important characteristics of a rehabilitation programme; indicating that clients need to take an active role during the rehabilitation process; the importance of starting the process of return to work as soon as possible; the benefits of skills development, as well as the need for follow-up of clients with SCIs post discharge from the rehabilitation facility.

One of the participants, AM12-OT, commented as follows regarding the importance of persons with SCI taking an active role during the rehabilitation process:

*'Clients themselves, they need to be involved, so, and I'm not talking about the level of their organisations but I mean the individuals, they need to be involved because they are the ones that are experiencing it, they are the customers, really, right. The customers of the service we want to provide.'*

IR10-OT said the following regarding starting the return to work process as early as possible:

*'So, in the acute phase if they can already discuss what will be necessary to return to work and if they going to return to their previous work or whether they should look at alternative work and then, from there on if they could be referred from the acute phase to a return to work OT. I think it would be very valuable.'*

AM12-OT also shared the following regarding importance of returning to work sooner after the injury:

*'I definitely, definitely, don't think that they (referring to clients with SCIs) need to be staying at home, right. Research shows that people that stay at home post injury, for more than, we will have to check this up, I don't remember what the time period was, I don't know if it's six months or year, I can't remember the time period. But they are more likely not to return to work than people that have return to work within the X-amount of time. There is research that shows that the quicker you can get back to work the more success there is of you to return to work, those who took for a very long time are less likely to go back to work.'*

And another participant, AN08-OT, said the following regarding the importance of up-skilling persons with SCIs in order to facilitate successful reintegration to work:

*'But also looking at ways where they can empower themselves, to do entrepreneurial activities, skills development, programmes, to do, even if it is woodwork, someone that is, you know, is a paraplegic, something like that.'*

Another participant, RW13-OT, added the following regarding the importance of following up of clients with SCIs:

*'So, I think, when they then received their rehab at Conradie then, it was a really good rehab if they have regular follow-up, obviously a person, I think about the lot of things, the manpower, resources that, the implications and limitations to the follow-up. There wasn't also protocol really in that, for patients to really come back, you know. Unless something happens for, out of their illness they would, but that and then that's when I actually realised that, even with SCIs patients they should regularly be followed up, like, every six months.'*

#### Sub-theme 4.2: The importance of team work in facilitating successful integration to work

This sub-theme summarises what the participants shared in relation to the different rehabilitation team members involved in facilitating successful integration to work.

AN08-OT said:

*'I would hope that there is a team, liaising with each other, the Physio, the OT and so on, Speech Therapist, whatever. They are liaising with each other.'*

And she went on to add:

*'I think the doctors obviously, but I often think that they don't truly understand their role because they are quick to write return to work on light duty but then the person still isn't able to cope because they don't understand the job demands and I think that is where we come in.'*

While IG11-OT commented as follows:

*'The Social worker, cause they are still human beings, they might have some social issues as they have to sort out, so, the Social worker would be good.'*

And, RW13-OT shared her views as well and said:

*'I really believe that with, you know, also good psychological input, counselling, which we sometimes almost leave for other, you know, for other psychiatric conditions because we say to ourselves is normal that somebody feel the way they feel because of their injury, you know.'*

And then she went on to say:

*'My opinion is that certain clients with SCIs might not see an OT. So I guess it should be anyone in the health profession that have access to this person and is aware of what kind of limitations they are going to be facing because of it but the main thing is, I think is an OT. And if that person isn't there then everyone should have the knowledge, at least to know where to refer this person for more assistance.'*

The participants also mentioned additional role players, i.e., other than health professionals, that assist during rehabilitation and in facilitating successful reintegration to work for persons with SCIs.

RW13-OT gave her view on the need for an assistive device technologist:

*'How are you gonna set up this, you need people that can, I don't know, weld something or design something so that the wheelchair holds that thing... So, if I may put it this way, a mobility/assistive device technologist which we don't have.'*

In teamwork there is always a need for a person to coordinate inputs from different team members and give leadership to teamwork. AM12-OT commented as follows regarding the need and the important role that can be played by Case Managers:

*'If they have their job or had a job pre-morbidly, and have a Case Manager assigned to them to facilitate them getting back to that previous job. The Case Manager assigned to them but now it will be in place, where we have things like, to access education, etc. The Case Manager, kind of act as the facilitator for that person getting registered at the local school, to finish his or her matric. And helping this person to facilitate, or understanding, you need to compile a CV, you need to try looking for a job.'*

And she went on to add the following regarding the assistance that the Case Manager can provide to the employer:

*'So, you know really, taking almost an employer's hand and you have like Case Managers which I don't think we truly ever hear about. I'm talking on Case Managers in Britain or something, where you have a Case Manager and they sort of somehow coordinate this whole thing, doing, what is now needed. Who's gonna talk to the HR about how, how we gonna make this a possibility? How we truly seriously gonna consider helping this person return to his work environment, sustaining, you know, helping because it's not about the health, and it's not just about the patient, it's truly about helping employers and it's truly just a challenge.'*

Sub-theme 4.3: The important role played by OT in facilitating return to work

All the participants mentioned the important role played by the OTs in facilitating return to work, some of their comments are indicated below as follows:

LS06-OT shared her views regarding the role of the OT:

*'Ideally, you want an OT to be involved in that, not just assessing the client, you know, to do actually placement to a specific work area, so I think the OT there...'*

Another participant, AN08-OT, related her experience of doctors recommending return to light duty, where it would be preferable to involve the OTs to do a functional capacity evaluation, which includes job analysis of the work that the persons affected by injury will be returning to, as this is what OTs specialise in:

*'We (as OTs) are able to break all of these things down...so, if the patient is going for Physio they will be able to track their progress and see, ok, they've improved from this point to this point, this is what they are able to cope with, from the physical side of things, and then OT being able to provide input with regards to functionally, what is that mean for the patient.'*

Another participant, RW13-OT, alluded to the same views and said:

*'I definitely think OTs play a large part in this, massive, massive role.'*

IG11-OT said regarding the role of OTs:

*'So yes, they have regained full ROM or 80% of the muscle strength that they require, what is it that impact on the person's actual work capabilities; to what extent*

*are they able to resume their full duties. So, I think, definitely there's various role players but OT will be the one of the important one.'*

#### Sub-theme 4.4: Reasonable accommodation

The participants across all three groups shared their views on what types of accommodations need to be done as well as who the role players should be to facilitate successful return to work for clients with SCIs.

One of the participants, AN08-OT, saw positive potential opportunities regarding reasonable accommodation:

*'I think, there are lots of opportunities for persons with disabilities and, companies are more aware of, you know, they are willing to put in the reasonable accommodations for their persons. So, there is an opportunity for them to return. So, I think that is definitely an enabler.'*

In sharing some of these potential opportunities for implementing accommodations, she said:

*'Or, if they cannot afford it, or cannot take that responsibility, maybe set up a community support or even employer support for transport to work.'*

Additionally:

*'The HR [Human Resources] definitely, in the sense that if there is, and also the managers. Everybody that is directly involved with this person because when it comes to things like the reasonable accommodations it's often not just the physical changes, the structural changes. When it comes to leave, or specially leave required, if there is any doctor's visits, temporary incapacity periods, if there are operations, with things*

*that needs to take place. So I think the management of those things, that the person doesn't, isn't classified as underperforming because it's things that could have been measured, that could have been put in place for them. Ja, strategic people management, so that they are still able to meet their full work demands and they don't then become a burden on the rest of the team that they are working within, they are a headache to the manager that they are serving under.'*

AM12-OT also shared an example of the type of accommodation required:

*'If, they are not able, say for example, someone in a clerical position and now they suffered a SCI to the neck and they are not able to, physically, do their work, as in typing and answering the phone, filing, but they still cognitively intact. Then they could maybe have an assistant to assist them with the tasks but if they are not cognitively intact or if they are not on a certain level. I mean you need to be on a certain level to work. If you cannot physically work then at least you must be able to contribute something to the work place with your cognition, with your mind.'*

Another participant (RW13-OT) also gave similar examples of accommodation pointing to access to personal assistants for persons with SCI in the workplace:

*'You know people, sometimes, they need another carer cause who is gonna take the person to the loo and things like that, you know. Who's gonna, maybe, hold the cup so they can have their tea. So, I know from my brother's experience. He employed someone and he also employed the patient's wife as a tea-lady so that she was there to assist him, you know, giving him his sandwich because he was a quadriplegic, so he couldn't really do that, they made some adjustments. It was like a call centre and my brother actually did make a lot of effort for this client and so, for the client and so that was the, that was the wonderful thing to do but everybody is not gonna employ your*

*wife, your carer to be there and they've made some, as I said, structural changes, in terms of ramps and things like that and then, you know.'*

She also added access to assistive devices as means to accommodate a person with SCI:

*'I know, someone told me, in America, even a lecturer was a quadriplegic, but he had a wheelchair that could go up steps. So, we have technology, but our technology hasn't advanced. It's not integrated technology, so that people can work, like, you know, they can change the power points of the slides or linking their sound system, you know. I think there's one guy that Elwin told me about, and I suppose he is a private patient, so he could afford all of those gadgets and stuff but the reality is our context and the truth of the matter is that you can, there's great possibilities.'*

Some of the participants shared that it might be possible to accommodate a person with SCIs in some work places but not in others, depending on how big or small the company is, and they shared their insights as follows:

IR10-OT said:

*'I think they will need to buy-in into accommodations, obviously with reasonable accommodation, it should not cause undue hardship to the employer. So, it also depends on also the size of the company that the client needs to return to. But ja, just to be open to suggestions about accommodations, possible adaptations to the physical environment. Yep, so the commitment of accommodation possible. You know, there's structural barriers in the working environment, it can be a small company, so a cost, in order to change things, is a challenge for the employers.'*

And AM12OT also added the following in relation to accommodation being reasonable to the employer:

*'And we never look at their [referring to the employer] side of the story, we look at them, sometimes they being mean because they don't care but we haven't given them enough time, but we haven't engaged properly with them to almost show them that, look there is a possibility, and maybe here the state can come in. If you gonna have to make, an example of R20000 changes, I mean for a small company, that is a lot of money, you know, think of some tax deduction for that employer or some other form of how.'*

Another participant, RW13-OT also shared similar views:

*'And to actually just carry that through also, as I said, multiple work visits, really. I'm talking the ideal here. I know the reality is not so. You know, where you obviously have to help even an employer because this is now, he is worried about sustaining his business, his profits and, because at the end of the day if he doesn't make it, he can't employ people.'*

The participants indicated that the OT is the one responsible to coordinate reasonable accommodation and that it needs to be done sooner. One of the participants, AN08-OT, shared her views as follows:

*'I think OT, has a very big role to play in that. And I think we definitely under-utilised, within facilitating the return to work process because generally we get involved when it's now an insurance pay-out or the company wants to get rid of the person and they want them medically boarded, without having. Whereas if we had been involved in the process a lot sooner. We will be able to identify the different avenues that could possibly have been taken, but again, not just for your SCI but any*

*persons with the disability if there is a return to work, because we understand function, we can do the job analysis and see exactly what kind of job demands would this person be able to return, but again I know that, from an institution's side, our resources are very limited. So, doing the ideal return to work assessment, with the work visit and all of those things, we are limited, but again I don't think that should, that takes away from our role or the significance that we do have, in advising in the return to work of person with disabilities.'*

Theme 5: Perceived heavy price to pay in reintegrating disabled person back to work: 'The minute they see a wheelchair...they feel that is way too much investment...'

This theme highlights participants' views on what employers perceive as huge costs related issue of inaccessible transport and environment as challenges in reintegrating of PWDs to work.

Sub-theme 5.1: 'Accessible transport, struggling getting them to work'

This sub-theme focuses on major challenges of inaccessible transport that inhibits clients with SCIs to reintegrate to work.

Participants commented as follows:

AN08-OT said:

*'But, there's, the transport specifically, is a hindrance. Even though there is that opportunity, they aren't able to access it. Ideally, definitely a better transport system because as the Dial-A-Ride issue and those, and the MyCiti bus they have limited routes, which means limited access. So if we could get those things corrected there would definitely be more participation in gainful employment and would allow for successful return. Just, also the distance from work, travelling with the wheelchair,*

*having your car. So, there's major expenses, maybe as we, we haven't truly sorted out transport for people, you know. We have Dial-A-Ride but there's a lot of patients on the list that couldn't make use of the service at the moment.'*

Another participant, AM12-OT, shared similar views as follows regarding challenges with transport:

*'If you somewhere in the rural area it will be difficult or like if you from small town outside of Cape Town, for example, it's not gonna be as easy if you don't have means of transport, for example, transport I think it's also another thing, basically your resources, in terms of your environment also can limit you.'*

RW13-OT also related and said:

*'And the transport system, obviously, because, that is the most limiting thing for people because they can't get to where they need to go. Sometimes people, you know, they have no problem in their wheelchairs than the problem of being out in the community but they can't get there and, ja.'*

#### Sub-theme 5.2: Structural/built environment

This sub-theme highlights opinions shared by participants on the disabling or inaccessible structural environments a barrier to return to work.

AN08-OT said:

*'Other than transport, definitely, still attitudes within the work environment where companies are, on the one hand, yes. The companies that are pushing for BBBEE compliance are aware of these things and are willing to take on PWDs but at the same time there are still companies that don't feel they want to accommodate the PWD and specifically your Spinal Cord patients because the minute they see a wheelchair, to them, they feel that is way too much investment that they would have to put in, to making, having accessibility issues and those types of things. Which is actually, it's just a structural change that would need to be made and not really anything else.'*

Specific impairments that would not require physical accommodations were preferred in the workplace, the participant added as follows:

*'Where I've heard HR personnel making comments that, they would rather take somebody that has a psychological disability, not understanding that, the effects of what accommodations would have to be put in place, just because to them, putting in a ramp or making a change in the person's office to the ground floor, is too much of a mission for the company.'*

IR10-OT shared similar views and said:

*'And then the environments, like work environment, if they are accessible for PWDs with SCIs, in wheelchairs or whatever the case.'*

### **Group 3: The Manager**

This group entails a Manager of one of the clients with SCIs that participated in the study.

The three main themes that came out from interviewing him are as follows: the manager's attitude, in not showing interest in knowing and understanding the

support that is required for a PWD to successfully reintegrate to work; he also shared the necessity of reasonable accommodation and non-discrimination as facilitators to return to work for clients with SCIs.

#### Theme 6: Lack of interest in understanding the personal needs of the client

This theme highlights the manager's **lack of interest in understanding** the personal needs of the client in relation to psychological support and the value of the support groups provided at work. On the other hand, he also acknowledges the value of the community's support, in facilitating successful return to work for the clients affected by injury or disability.

##### Sub-theme 6.1: 'They talk to him. I don't know what, because I'm not a Psychologist'

This sub-theme emphasises the manager's attitude, i.e., his inability to show interest in finding out more in order to understand the value of psychological intervention and support groups, and also not seeing his role in supporting the affected employee, in facilitating reintegration to work.

CPTM09-EMP expressed his views when asked about what he thinks facilitated return to work:

*'Ja, I think, Psychology, Psychiatry, he used to attend sessions. I think those things helped him a lot. They talk to him. I don't know what, because I'm not a Psychologist but all I know is that he was attending all those session with them. So, I think that motivated him a lot.'*

And, he added the following, mentioning the support groups provided at work:

*'They used to be called to work sessions of disabled persons, inside the police. They used to call all the disabled, they will have talk with them and all that. But I don't*

*know what they talk about, I'm not there but he used to go to those sessions. I think there they give him a lot of support, they will talk, all those things. I can't be specific what they are talking about because I don't attend those sessions. I think the police are doing a lot, for the disabled person.'*

#### Sub-theme 6.2: Community's support is integral in facilitating return to work

This sub-theme emphasises the role of community support in facilitating return to work.

The participant, CPTM09-EMP commented as follows:

*'I think even the community, you see, it's very important. I don't know now, how can I say, but I think the community should also be involved somehow. What can I say? I don't know in what way but I think the community should also be involved, supporting him and all the other staff.'*

#### Theme 7: Accommodation as an integral part of return to work

This theme highlights the type of accommodations done in order to reintegrate the person with SCI back to work.

##### Sub-theme 7.1: Suitable work

This sub-theme reinforces the importance of providing appropriate/suitable work to facilitate successful reintegration to work.

CPTM09-EMP commented as follows:

*'We just welcome him and told him that he must be comfortable and, ja. I won't say there are things that I put in place for him. All I did is to give him the work that is suitable for him. I just gave him the work that is suitable for him under the condition*

*he is in, that's all. You see, mostly my environment. In my environment, there are people that are working outside, that are working outside but for him I just deployed him inside. He is not working outside anymore. So, he is just doing office work, only office work.'*

#### Sub-theme 7.2: Reasonable accommodation

This sub-theme focuses on types of accommodations that were put in place to ensure successful return to work for clients with SCIs.

According to CPTM09-EMP the following was put in place:

*'No, he is not going out. Ja. Just like other people, they are doing office work and also go outside. But in his case he is only doing office work.'*

And he added as follows:

*'In the beginning, his wife, in fact, his wife was supposed to be here to support him in ways, to be his support but if I'm right the State is paying the wife. I think that's the support that the Police put up to look after him. Ja, I think his car was also modified.'*

He went on and said:

*'How can I say, as I've said that, my office has decided to deploy him in an environment where he can work comfortably, without any, how can I say, I don't know.'*

Theme 8: The need for non-discrimination of PWDs: 'As I said that we must not discriminate him. We must regard him as a person, as a human being'

The participant (CPTM09-EMP) shared his views indicating that PWDs should not be discriminated against because of their disabilities and they should be treated the same as any other person.

Sub-theme 8.1: The person with disability must be treated like any other person

The sub-theme reinforces that the PWD must not be treated differently because of their disability.

The participant, CPTM09-EMP, shared his views and said:

*'Ja, I don't know what to say. As I said that we must not discriminate him. We must regard him as a person, as a human being. Don't, say for example, this person is disabled then there is nothing they can do, things that are done by other people, you see. Ja, I think. Make him feel accepted. You see, make him feel accepted. Me as his Commander.'*

And he added:

*'A person who is disabled must also be regarded as a human being. Like any other human being, you see, because and, be regarded as somebody who cannot do anything. Just regard him as any other human being. In other words, he must not be. How can I put it? They are also important.'*

Sub-theme 8.2: Acceptance by colleagues

This sub-theme highlights the importance of acceptance of the PWDs by colleagues and managers which facilitates successful reintegration to work.

CPTM09-EMP commented:

*'Ja, the colleagues, colleagues, that is working with him. He must accept him as he is because it was not his will to be like that. It was only God's will. So, me and the colleagues, I think they must just accept him as he is. They regard him as a person like them. You see they must not discriminate him. So that makes him feel comfortable at work, he feels comfortable.'*

Table 2

*Summary of the themes*

Main Themes	Sub-themes	Common Themes
<b>Group 1: Clients with Spinal Cord Injuries</b>		Support received Reasonable accommodation
<b>Theme 1:</b> The important role played by the support received: 'Yes they are helping me'	1.1 Support and assistance received from family, friends, church and work 1.2 Skills training and reasonable accommodations	
<b>Theme 2:</b> The limitations and challenges experienced as a result of Spinal Cord Injury: 'They couldn't keep me there anymore'	2.1 Job demands 2.2: No support received from work	
<b>Theme 3:</b> Motivation to work		

<b>Sub-theme 3.1: Extrinsic vs. intrinsic motivation</b>		
<b>Group 2: Occupational Therapists</b>		
<b>Theme 4:</b> The important role played by good rehabilitation: 'I think, from my experience, it's obviously good rehabilitation initially'	4.1: Characteristics of rehabilitation to ensure successful return to work 4.2: The importance of teamwork in facilitating successful integration to work 4.3: Reasonable accommodation	
<b>Theme 5:</b> Perceived heavy price to pay in reintegrating disabled person back to work: 'The minute they see a wheelchair, to them, they feel that is way too much investment that they would have to put in, to making, having accessibility issues and those types of things'	5.1: 'Accessible transport, struggling getting them to work' 5.2: Structural/built environment	
<b>Group 3: The Manager</b>		
<b>Theme 6:</b> Lack of interest in understanding the personal needs of the client: 'They talk to him. I	6.1 Lack of interest in understanding the personal needs of the client	

<p>don't know what, because I'm not a Psychologist but all I know is that he was attending all those session with them. So, I think that motivated him a lot'</p>	<p>6.2 Community support is integral in facilitating return to work</p>	
<p><b>Theme 7:</b> Accommodation as an integral part of return to work. 'All I did is to give him the work that is suitable for him. I just gave him the work that is suitable for him under the condition he is in, that's all'</p>	<p>7.1: Suitable work 7.2: Reasonable accommodation</p>	
<p><b>Theme 8:</b> The need for non-discrimination of PWDs: 'As I said that we must not discriminate him. We must regard him as a person, as a human being'</p>	<p>8.1: The person with disability must be treated like any other person 8.2: Acceptance by colleagues</p>	

## Discussion

The barriers (internal and external) related to reintegration to work

### **Unavailability of support**

The study findings correlate with what Moss and Marston (2009) findings relating to **non-availability of support** of PWDs which hinders return to work for clients with disabilities, as all three groups of participants in the study viewed lack of support as a barrier or its availability as a facilitator to reintegration to work for persons with SCIs. It is reported that many PWDs are well motivated to find work, they are prepared to take some risks and pursue training options or new areas of possible employment, but usually the **main barriers are connected to lack of support**, in addition to other barriers such as discrimination, unavailability of suitable jobs, rather than individual's motivation to return to work.

Participants reported that **they did not receive any support (not even financial support) from their employers** after the injury. These findings are supported by Phillips, Hunsaker and Florence (2012) who reported that, income at the time of injury can impact the ability to return to work and productive activities in multiple ways, as those who are wealthier may be able to purchase equipment, secure transportation or hire assistants that would enable them to go to school or return to work. They are also more likely to have funds to pursue school or vocational training. Therefore, non-availability of support from the employer is indicated as a barrier to return to work.

### **Family support**

Most of the support was received mainly from families and friends. This is also reported by Post, Bloemen & de Witte (2005) in their study, based on the burden of support for partners of persons with SCIs. Most partners provided various kinds of support; ADL support, and other practical support was given more often by partners of persons with serious disabilities but there was less difference seen regarding emotional support. Professional (paid) support was obtained by 45.3% of all couples in this particular study.

### **Resource and service limitations**

Coetzee et al. (2011) reported that offering a **comprehensive vocational rehabilitation in South Africa has not been possible** due to limited resources, especially more in the public sector, resulting in huge numbers of persons affected by injury, illness or disability requiring disability grants and, hence there was a shift towards applications and assessments for disability grants.

It was further reported by Coetzee et al. (2011) that the Department of Health (DOH) provided limited work preparation services for other government departments, private and non-governmental organisations, therefore reducing means of promoting employment opportunities for PWDs. Rehabilitation as a predominantly health concern creates a narrow scope of service delivery and therefore impacting on outcomes of employment.

The researcher having first-hand experience of the above, having worked in different health facilities in the Western Cape, has observed that there are **limited state funded rehabilitation facilities**, for example, there is only one government in-patient rehabilitation centre in Cape Town, i.e., the Western Cape rehabilitation centre for physical disabilities. There are also limited vocational rehabilitation services in the government health facilities and, therefore, OTs only focus on functional capacity evaluations (information gained by the researcher, having worked both at Groote Schuur and Tygerberg hospital's work assessment units); also limited available facilities in the non-governmental (such as, Siyaya Skills institute) and private sector (for example, Life Rehab) that are only accessible to a minority and, therefore, not meeting the demand of the population of PWDs. It was also mentioned by some of the participants (OTs) that their **main focus during active rehabilitation was more on activities of daily living (ADLs) and not as much on work.**

However, according to Cook (2006), things are different in the US; government is responsible for vocational rehabilitation of individuals affected by injury or disabilities and these services aim to promote reintegration of persons with disabilities to work. It is further reported that 1.3 million adults in the US, accounting for only 12% of all Americans, are estimated to have health conditions or impairments that limited their ability to work.

### **The impact of SCI on the reintegration to work**

Regarding **the impact of SCI on the reintegration to work**, Somers (2001) reported that damage to the spinal cord has profound and global effects, leading to various impairments, such as, inability to use their hands, inability to walk, as well inability to work or participate in self-care or leisure time activities. In many instances, paralysis makes it impossible or impractical to return to a job held prior to the injury. It can also result in a host of debilitating and potentially life-threatening physical complications.

The reasons that were indicated for not going back to work, such as, **the effects of the injury** and **not meeting the physical demands of the job** were also shared by Gething et al. (2006). It is reported that the participants in their study were most concerned about the consequences of their injury in addition to psychological adjustment issues, such as attitudes and ignorance (of the community and the employer) to the injury. Similarly, in a study done by Krause et al. (2010) on delayed entry into employment after SCI, looking at factors related to time to first job, the findings indicate that it took longer for those with more severe SCI to find work, and that **injury severity was highly correlated with post-injury** employment rates.

### **Inaccessible transportation and environment**

According to WHO (2011), **challenges with transportation** were also reported as a frequent reason for PWDs being discouraged from seeking work or prevented them from accessing health care. It is further reported that removing barriers including providing accessible transport, will enable people with disabilities to participate in education, employment, and social life, thereby reducing their isolation and dependency. Also, in Gething et al.'s (2006) study, people with SCI cited access and transport as important with regards to education and employment. They mentioned difficulties in affording or maintaining private forms of transport, such as a car.

The **barrier of inaccessible environment** to reintegrating to work was supported by World Health Organization (2011); it is reported that key requirements for addressing accessibility and access standard require cooperation between the public and private sector. Evidence has shown that mandatory minimum standards, enforced through legislation, are required to remove barriers.

### **Poor interest in understanding the needs of the person with SCIs**

Regarding the manager's **poor interest in understanding the needs of the person with SCIs** which coincides with some of the **manager's declining to participate in the study** post SCI, Ned and Nzwayiba (2017) reported in their study findings that this was related to external barriers, such as social stereotypes of the abled- bodied co-workers, as a result of perceptions of poor abilities and limitations of PWDs; this resulted in PWDs not disclosing their disabilities due to fear of being marginalised and, consequently, not being accommodated. This is further shown by the manager's response to psychological support and lack of interest in what it means and entails to his employee. Though he has reintegrated the PWD, there is evidence of general lack of interest.

### The facilitators for successful reintegration to work

### **The need to eliminate discrimination and attitudes within the work place**

The *United Nations Convention on the Rights of Persons with Disabilities* (UN 2006) supports the need to eliminate discrimination on the basis of disability by any person. The UNCRPD (UN 2006) further says that all appropriate measures must be put in place to remove barriers that prevent full participation of PWDs. However, despite having these integration policies, South Africa still has a picture of employment that is devastating. According to Ned and Ndzwayiba (2017), in their case study findings on the complexity of disability inclusion in the workplace at Netcare, despite having relevant policies if the environment is not prepared or conducive to receive PWDs, employment rates will remain low because of external and internal barriers. Internal barriers include low level of education, high drop-out rate at tertiary institutions and poor work experience of PWDs, and external barriers include negative perceptions and attitudes of the non-disabled co-workers and other issues.

The findings of Ned and Nzwayiba's (2017) study indicate that once all the different interventions were done to overcome these barriers at Netcare, starting with top management incorporating certain interventions as part of the company's strategic plan and using certain outcomes (employees' disability statistics) to measure performance for their middle and junior managers, a marked improvement in terms of integrating PWDs to work was evident. The types of interventions included training, awareness programmes, accommodations, partnerships with disabled organisations, incentives for employees who referred PWDs who were successfully placed at Netcare, etc.

According to Waxman (2017), barriers to integration to work for PWDs are also related to the **supervisors' and non-disabled co-workers' attitude**, as a result of their stereotypes and discomfort in being in the presence of PWDs; communication

difficulties between non-disabled employees and PWDs; as well their lack of prior experience in dealing with PWDs.

Ned and Nzwayiba (2017) further reported, based on their findings, transformational leadership requires a dedicated leadership style where learning and actions are taken; and challenging of organisational culture to view disability as a human phenomenon.

### **The benefits of rehabilitation and the important role played by the rehabilitation team**

Regarding the **benefits of rehabilitation** and the **role played by rehabilitation team** in facilitating reintegration to work, Somers (2001) reported that the rehabilitation team provides appropriate equipment and guidance as well as reducing disability by preventing secondary conditions. These professionals work with patients and families to minimise impairments and maximise functional capacity. The same was also reported by Haugli, Maeland & Magnussen (2011) who indicated that participants (in a study done to establish what facilitates return to work three years after occupational rehabilitation) expressed that the rehabilitation programme had encouraged them to reflect on what was important to them, and they realised that they had a choice in life.

Other important facts are the **important role played by OTs**, and **necessity of involving OTs as early as possible**, i.e., after stabilisation of the patient's functional state, following SCI, in order to facilitate return to work. Pillastrini et al. (2008) also supported this view as they alluded to the fact that OT's unique contribution to occupational performance lies in its use of purposeful activities. It is applied in solving the problems of occupation (self-care, work and leisure) of the patients. The reason for the early involvement is for the OT to evaluate the person's ability and level of functioning in their home and/or at work, to provide individualised therapy

to retrain people to perform daily living skills using adaptive techniques; and to facilitate coping skills that could help a person overcome the effects of SCI.

Fabrizio (2009) also added that **OT practitioners** are trained in how the injury and illness affects human body structure and the physiological functions. They can also investigate how the environment can compromise or promote health as well as identify factors that can either prevent or be detrimental to someone's health or safety and therefore assist the employer by advising on what measures need to be taken in order to minimize anything that is perceived as potential to compromise workers' safety and health.

Regarding the view that persons with **SCIs should play an active role in the rehabilitation programme**; this was supported by Somers (2001) who recommend that in order to foster an independent attitude, the rehabilitation team must emphasise the patient's autonomy and personal responsibility. They must also encourage patients and, facilitate them taking initiative, directing and participating fully in the rehabilitation programme.

### **Skills development**

Regarding the **up-skilling of PWDs** (skills development); in order to increase their chances of finding alternative suitable work, Ned and Nzwayiba's (2017) study found that one of the successful strategies used is offering learnerships for those clients with disabilities who did not complete high school as a means to close the skills and knowledge gap, as well as offering internships for those clients who had a tertiary qualification in order to provide relevant work experience.

Skills training programmes and learnerships are used by some of the clients with disabilities (and those with SCIs) to acquire a variety of skills and knowledge, such as business administration skills, short term insurance, retail, cleaning, etc. There are

few recruitment agencies that focus on PWDs, offering such programmes as The Siyaya Skills Institute, that offers such services to disabled adults, aged 18–40 years. They adhere to the criteria of the EEA to determine whether a person is disabled. They employ an OT who screens the applicants in order to ensure appropriate placement in a suitable skills training programme or learnership. The candidates are registered with the SETAs in order for individual grants to be paid to the institute and then the candidates receive a monthly stipend throughout the 12-month learnership programme (Siyaya Skills Institute 2015).

### **Follow-up**

Regarding **the importance of follow up of persons with SCIs** after discharge, Life Rehab (2013) reports that in South Africa, a rigorous and routine follow-up of persons with SCIs by a team of appropriate specialists is not common practice, which explains why the SCI complications are widespread and possibly more prevalent than necessary. It goes on to say that it is critical that a team of specialised professionals with expertise in dealing with SCIs assess and manage these people to anticipate and manage complications before they become irreversible. The SCI Annual Review Programme at Life is for both paraplegics and tetraplegics; together with their patients and families to provide continued access to the rehabilitation doctors and a team of expert rehabilitation professionals, in order to manage the patient's condition and prevent future hospitalisation. This is a focused and structured programme which aims to empower individuals who are integrated back to their communities and productive lives.

### **Reasonable accommodation**

Regarding **reasonable accommodation** which was shared by all three groups of participants as an important aspect of reintegration into work, WHO (2011) also

supports **early return to work with appropriate supports** (e.g., reasonable accommodation) which have been proven to improve the rates of return to work, and this coincides with what one of the participants indicated, that the longer the time it takes to return to work the lower chances of integrating to work. It goes on to say that ignorance about available adjustments to work arrangements limits employment opportunities.

Employers are required by law to make reasonable accommodations, such as making recruitment and selection procedures accessible, adapting the working environment, modifying working times, and providing assistive technologies, as these can reduce employment discrimination, increase access to the workplace, and change perceptions about the ability of PWDs to be productive workers. It is further reported that antidiscrimination laws provide a starting point for promoting the inclusion of PWDs in employment; a range of financial measures, such as tax incentives and funding for reasonable accommodations, can be considered to reduce additional costs that would otherwise be incurred by employers and employees (WHO, 2011).

WHO (2011) goes on to state that the **employer has an obligation to enquire about the reasonable accommodation needs** of an employee with a disability, and that the employee with a disability can only commence duties when reasonable accommodation needs have been met. It, therefore, recommends that education of supervisors be part of the disability management programme and added that they too require some form of assistance to master the reasonable accommodation skill. Chabane (2014) and, also added that the employer needs to comply with the obligations of the EEA, including provision of **reasonable accommodation without unjustifiable hardship**; this was also mentioned by participants.

## **Motivation to work**

In relation to **motivation to work**, specifically intrinsic motivation, Soeker et al. (2008) reported that meaning attached to work by an individual is significant because of the degree of satisfaction that the individual derives from their work, whereas participants who were placed in jobs that had no meaning to them caused them to become frustrated.

Ikiugu et al. (2015) also reported that evidence from research suggests that participation in meaningful occupations, including work, generally leads to increased feelings of well-being.

However, Mitra (2008) reports that poverty can be the consequence of disability through the loss of employment or the reduction in earnings following the onset of disability; explaining some of the reasons that motivated persons with SCIs to take any employment to ensure their family's survival. It is further reported that employment and labour force participation are essential to understanding and dealing with the economic challenges of households with PWDs and that, access to employment is a fundamental aspect of the economic well-being of PWDs.

## **Conclusion**

The themes capture the participants' views on the barriers to return to work, such as: the limitations and challenges experienced as a result of SCI, employers' viewing reintegrating disabled persons to work as paying a heavy price, as well the employers' lack of interest in understanding the personal needs of the clients with disabilities. Additionally, the following barriers were indicated: inaccessible and non-supportive environment, the employers' attitudes, and the challenging job demands of the previous work, as well as inaccessible transport.

The themes also highlighted what the participants viewed as facilitators to return to work for clients with SCIs, such as: support received by persons with SCIs, motivation to work, the necessity of a client-centred rehabilitation and the role of the rehabilitation team and other role players; the need for reasonable accommodation measures to be put in place at work; and the non-discrimination of PWDs on grounds of disability.

The common themes shared amongst all three groups of participants were: support received by persons with SCIs; and reasonable accommodations that facilitated successful reintegration to work for some of the persons with SCI.

## **Recommendations**

- Barriers to return to work for persons with SCIs have been proven to be caused by the disabling environment (i.e., ignorance, attitudes, physical and structural barriers, etc.) rather than the injury itself. The findings suggest that changing of the environment (to be more accessible and accommodating) is more realistic than changing the physical effects of the injury on the individual (i.e., reversal of the injury). This can be done by using the different suggested strategies, such as: education and awareness about disability, skills development for persons with SCIs, development of universal-design structures, government involvement in driving the implementation by putting strict measures in place for policy implementation, and providing the necessary resources required in order to improve rate of return to work for clients living with SCIs.
- The majority of persons with SCIs are still not employed because of multi-faceted issues, as indicated above; therefore, a multi-dimensional approach to integrate persons with SCI and those with disabilities in general is necessary. Policy implementation needs to be complemented or supported by

interventions that target sensitisation or preparation of the workplace to receive PWDs as well as working on ways to dispel myths and remove attitudes about disabilities, e.g. through developing task teams in the workplace to carry out education and awareness programmes.

- It is recommended that efforts are made by all stake holders to minimise barriers to employment, i.e., government should be the major role player to ensure that policy is implemented and necessary resources are made available; the rehabilitation team members need to reinforce client-centred rehabilitation; while clients with SCIs need to take an active role in their rehabilitation.
- Involvement of additional role players, such as case managers, assistive device technologies and peer supporters is recommended; as well as the education and involvement of the employer and, the support of the community.

## **Limitations**

- The Researcher could not do the study project at WCRC, as originally planned. The request to do the study was declined due to changes in the type of clients with SCIs admitted there. She therefore had to explore different facilities to get suitable participants and, therefore, this limited the initial plan to use different methods of data collection. This could have been prevented by informing the institution on the intention of doing the study project at that particular institution well in advance, which was impossible to do without approved research proposal.
- The researcher was unsuccessful in getting persons with disabilities (SCIs) who were females and from other racial groups other than Africans and Coloured males who participated. The majority of persons affected by SCI are males as evidence from literature has suggested. There was one female

participant who was sourced but declined to participate and this could not have been prevented as they are allowed to agree or decline to participate.

- For those clients who did not return to work the researcher did not get permission or response from the client's previous work to participate in the study as the clients had left their place of employment approximately four years prior. Therefore, the previous employers' perspective on the factors impacting on returning to work was not explored in this study project. This could not have been prevented as people are given a choice to agree or decline to participate or drop out of the study project voluntarily, should they wish to do so.
- A small sample was used to represent a population of persons living with SCIs, OTs involved in the rehabilitation of clients living with SCIs, and only one employer representative, for the entire Western Cape Province. Therefore, the participants' views obtained cannot be generalised to everyone living with SCI, to all OTs involved in the rehabilitation of patients with SCIs in the Western Cape, however, their views carry very valuable information that could be useful in the rehabilitation of people living with SCIs in order to successfully reintegrate them to work.
- There was restrict scope and time frames for this study project in order to meet requirements of a mini thesis for master's degree purposes.

Future research to further inform rehabilitation services and to provide more assistance and support, are recommended, for both persons with spinal cord injuries and employers, including the following:

- To explore views of the employer on how can they best be supported in facilitating return to work for clients with spinal cord injuries
- To determine the benefits of involving case managers in the process of reintegrating persons with disabilities to work

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## APPENDICES

### Appendix A1–A4: Approval letters



UNIVERSITEIT-STEPLENBOSCH-UNIVERSITY  
JOB KENNISVERKRIEG • YOUR KNOWLEDGE PARTNER

#### Approval Notice Response to Modifications- (New Application)

30-Jan-2015  
Ngemtu, Sharon SN

**Ethics Reference #:** S14/05/118

**Title:** Exploring barriers and facilitators to return to work for clients with spinal cord injuries, in Cape Town, South Africa.

Dear Miss Sharon Ngemtu,

The Response to Modifications - (*New Application*) received on 17-Oct-2014, was reviewed by members of Health Research Ethics Committee 1 via Expedited review procedures on 30-Jan-2015 and was approved.

Please note the following information about your approved research protocol:

**Protocol Approval Period:** 30-Jan-2015 -30-Jan-2016

Please remember to use your **protocol number** (S14/05/118) on any documents or correspondence with the HREC concerning your research protocol.

Please note that the HREC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

#### **After Ethical Review.**

Please note a template of the progress report is obtainable on [www.sun.ac.za/rds](http://www.sun.ac.za/rds) and should be submitted to the Committee before the year has expired. The Committee will then consider the continuation of the project for a further year (if necessary). Annually a number of projects may be selected randomly for an external audit.

Translation of the consent document to the language applicable to the study participants should be submitted.

Federal Wide Assurance Number: 00001372

Institutional Review Board (IRB) Number: IRB0005239

The Health Research Ethics Committee complies with the SA National Health Act No.61 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 Part 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health).

#### **Provincial and City of Cape Town Approval**

Please note that for research at a primary or secondary healthcare facility permission must still be obtained from the relevant authorities (Western Cape Department of Health and/or City Health) to conduct the research as stated in the protocol. Contact persons are Ms Claudette Abrahams at Western Cape Department of Health ([healthres@pgwc.gov.za](mailto:healthres@pgwc.gov.za) Tel: +27 21 483 9907) and Dr Helene Visser at City Health ([Helene.Visser@capetown.gov.za](mailto:Helene.Visser@capetown.gov.za) Tel: +27 21 400 3981). Research that will be conducted at any tertiary academic institution requires approval from the relevant hospital manager. Ethics approval is required BEFORE approval can be obtained from these health authorities.

We wish you the best as you conduct your research.

For standard HREC forms and documents please visit: [www.sun.ac.za/rds](http://www.sun.ac.za/rds)

If you have any questions or need further assistance, please contact the HREC office at 219389156.

#### **Included Documents:**

Protocol

Investigator CV (Ngemtu)

Protocol Synopsis

Investigator declaration (Ngemtu)



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jod. kenn. lewenswêreld • your knowledge partner

### **Ethics Letter**

15-Apr-2016

**Ethics Reference #:** S14/05/118

**Title:** Exploring barriers and facilitators to return to work for clients with spinal cord injuries, in Cape Town, South Africa.

Dear Miss Sharon Ngenmtu,

The HREC approved the following progress report by expedited review process:

Progress Report dated 30/01/2015 - 30/12/2015

The approval of this project is extended for a further year

Approval date: 15 April 2016

Expiry date: 14 April 2017

If you have any queries or need further help, please contact the REC Office 219389819.

Sincerely,

REC Coordinator  
Ashleen Fortuin  
Health Research Ethics Committee 1



**GROOTE SCHUUR HOSPITAL**

Enquiries: Dr Bernadette Eick

E-mail : [Bernadette.Eick@westerncape.gov.za](mailto:Bernadette.Eick@westerncape.gov.za)

Ms. S. N. Ngemntu  
Centre for Rehabilitation Studies  
Stellenbosch University

E-mail: [Sharon.Ngemntu@westerncape.gov.za](mailto:Sharon.Ngemntu@westerncape.gov.za)

Dear Ms. Ngemntu

**RESEARCH PROJECT EXTENSION: Exploring Barriers and Facilitators To Return To Work For Clients With Spinal Cord Injury In Cape Town, South Africa**

Your recent communication to the hospital refers.

The extension of your research has been approved in accordance with Stellenbosch University's clearance, until **14 April 2017**.

As previously mentioned:

- a) Your research may not interfere with normal patient care.
- b) Hospital staff may not be asked to assist with the research.
- c) No hospital consumables and stationary may be used.
- d) **No patient folders may be removed from the premises or be inaccessible.**
- e) Please provide the research assistant/field worker with a copy of this letter as verification of approval.
- f) Confidentiality must be maintained at all times.
- g) Once the research is complete, please submit a copy of the publication or report.

I would like to wish you every success with the project.

Yours sincerely

*Signed by Dr B. Jacobs*

**DR BERNADETTE EICK**  
**CHIEF OPERATIONAL OFFICER**

Date: 28 September 2016  
BE/vms

C.C. Mr L. Naidoo  
Mrs R. Pillay  
G46 Management Suite, Old Main Building,  
Observatory 7925

Tel: +27 21 404 6288 fax: +27 21 404 6125

Private Bag X,  
Observatory, 7935

[www.capegateway.gov.za](http://www.capegateway.gov.za)



TYGEBERG HOSPITAL,  
REFERENCE: Research Projects  
ENQUIRIES: Dr GG Marais  
TELEPHONE: 021 938 9752

Ethics Reference: 914/05/118

**TITLE:** Deploying hardware and facilities to return to work for clients with spinal cord injuries, in Cape Town, South Africa.

Dear Miss Sharon Ngweni:

**PERMISSION TO CONDUCT YOUR RESEARCH AT TYGEBERG HOSPITAL.**

1. In accordance with the Provincial Research Policy and Tygerberg Hospital Notice No 40/2008, permission is hereby granted for the extension of your research here at Tygerberg Hospital.
2. Researchers, in accessing Provincial health facilities, are expressing consent to provide the Department with an electronic copy of the final feedback within six months of completion of research. This can be submitted to the Provincial Research Co-ordinator ([Health\\_Research@westerncape.gov.za](mailto:Health_Research@westerncape.gov.za)).

  
**DR GG MARAIS**  
**MANAGER: MEDICAL SERVICES (RESEARCH CO-ORDINATOR)**

  
**DR E ERASMUS**  
**CHIEF EXECUTIVE OFFICER**  
Date: 1 December 2016

## Appendix B1-B3: Interview schedules

### B1: INTERVIEW SCHEDULE FOR CLIENTS WITH SPINAL CORD INJURIES

Participant No...

#### A. GENERAL INFORMATION:

Basic information: Age: Gender: Occupation:  
 Industry: Public: Private: Other:  
 Marital status: Single: Married: Divorced: Separated:  
 Language: Xhosa: English: Afrikaans: Other:  
 Race: African: White: Coloured: Indian:  
 Other:

#### B. DETAILS OF THE INJURY AND REHABILITATION:

Date/onset of injury:

Type of injury: Cervical: Thoracic: Lumbar/Sacral: Other:  
 Cause of injury: MVA: PVA: Stab: GSW:  
 Fall: Other:

REHABILITATION DETAILS: Where: Period: Date of Discharge

Complications during rehabilitation (if any):

Vocational rehabilitation details: (if any): Assistive devices currently used (if available):

Rehabilitation outcome level:

#### C. OPEN ENDED QUESTIONS:

1. What job were you doing before the injury and, where did you work?

Ubusebenza umsebenzi onjani kwaye ubuphangela phi phambi kokuba ulimale?

2. Are you currently working, answer "Yes"/"No"?

Uyaphangela na ngoku? "Ewe" okanye "Hayi"

2 (a) If you answer "Yes" in Quest 2. What job are you doing and where do you work?

Ukuba uyaphangela ndixelele uba uphangela phi, kwaye wenza umsebenzi onjani?

Ufumene uncedo olunjani ukuze ukwazi ukuphangela okanye ubuyele emsebenzini?

2 (b) What do you think has helped you to return to work? In what way?

Ucinga yintoni ekuncedileyo ubuyele emsebenzini?

2 (c) If the answer was “No” in question 2. What do you think has prevented you from returning to work and, why?

Ukuba awuphangeli, kwenzeke ntoni uzube awukwazanga ukubuyela emsebenzini okanye uphangele?

3. If you are working now. What kind of support is available to you, at work, as a person living with a physical disability?

Ukuba uyaphangela, khawutsho luncedo olunjani olufumanayo emsebenzini njengomntu okhubazekileyo ngokomzimba?

4. As a person living with disability, what kind of challenges are you faced with at the moment at home, in the community or at work (if you are working)? Please explain.

Njengomntu okhubazekileyo, zeziphi iingxaki ohlangabezana nazo endlini, ekuhlaleni okanye emsebenzini?

5. As a person living with disability, what kind of support do you receive at home, community or at work?

Njengomntu okhubazekileyo, loluphi uncedo nenkxaso oyifumanayo endlini, ekuhlaleni okanye emsebenzini?

6. What do you think could have been done differently or more, by your rehabilitation team to facilitate your successful return to work and, why?

Zeziphi ezinye izinto engezenziwe yi rehabilitation team yakho ukunikeza uncedo okanye inkxaso ukwazi ubuyela emsebenzini okanye ukwazi ufumana umsebenzi?

7. What do you think could have been done differently or more by your employer to ensure successful return to work and why?

Ziintoni ezizezinye engezenziwe ngumqashi wakho ukuhlangabezana nawe ukuze ukwazi ukubuyela emsebenzini okanye uphangele?

8. Which team members were involved in your rehabilitation and, who else could have been involved in facilitating your RTW and, why?

Ngobani ebebekwi rehabilitation team yakho ngoku ubuse sibhedlele? Kwaye ngobani abanye ocinga ngebencedisile kweliqumrhu ukuze ukwazi ukubuyela emsebenzini okanye uphangele?

9. Rehabilitation outcome level on discharge?

Zintoni obukwazi uzenzela zona ukuphuma kwakho e rehab?

10. Is there anything else that you want to share with me regarding your injury up to now that you back at work or looking for work?

Ingaba ikhona na enye into ofuna ukundixelela yona malunga nolimala kwakho uzotsho kwelithuba ubuyela emsebenzi okanye ufuna umsebenzi?

11. Can I please contact you should I need clarity or more information?

Ndinga phinda ndikufonele xa ndinemibuzo okanye ndifumane ulwazi olubanzi malunga neependulo ondinike zona namhlanje?

Thank you for your time.

Enkosi kakhulu ngexesha lakho.

## B2: INTERVIEW SCHEDULE FOR OT'S

Participant No. ....

## A. DEMOGRAPHIC INFORMATION:

Age:

Gender:

When did you qualify as an OT:

Your involvement/role with SCI'S?

Period of exposure working with SCI's: (optional)

Type of SCI Rehabilitation:

Outpatient:

Inpatient:

Sector:

Public:

Private:

Other: (Specify)

## B. INTERVIEW QUESTIONS:

- 1) What were the occupational categories of clients, with SCI, you had consultation with or treated?
- 2) Can you please give a rough estimate, in percentage, of the rate of RTW for clients with SCI's?
- 3) What are the rehabilitation outcome-level s (based on ICF outcome measure) for most of your clients with SCI's?
- 4) What do you think are the factors (physical, environmental, structural, psychological or attitudinal) that promote successful return to work for clients with spinal cord injuries?
- 5) What are the factors that prevent/inhibit clients with SCI's to be unable to return to previous or alternative work in the OLM?
- 6) What strategies would you suggest to be implemented to ensure successful re-integration to work, for clients with SCI's?
- 7) What would you suggest to be put in place for those clients with SCI's that are unable to return to work (temporarily and/or permanently)?
- 8) Who do you think should be the role players to facilitate return to work, for clients with physical disabilities (including those with SCI's)?
- 9) Are there any other comments that you want to share on this topic, RTW for clients with SCI's?

10) Can I please contact you should I need clarity or more information regarding what we discussed today on this topic?

Thank you.

### B3: INTERVIEW SCHEDULE FOR EMPLOYERS/MANAGERS

Participant No. ....

#### A. DEMOGRAPHIC INFORMATION:

Gender: Age:  
Occupation/ Job title: Period in the company:  
Industry: Public/Private Sector:

#### B. OPEN-ENDED QUESTIONS:

1. What job was the client doing before the injury? What did entail (job demands)?
2. What job is he/she currently doing, what does it entail?
3. What has assisted/prevented the client from returning to work and, why?
4. How do you think s/he is coping or managing after injury? Please elaborate.
5. What support systems do you have in place for employees who are affected by injury, illness or disability in your company?
6. What processes are in place/what happens to those clients who are unable to return to work?
7. What do you suggest is required/ should be put in place to ensure successful return to work for clients with physical disabilities (including SCI's) and, why?
8. Who do you think should be the role players in facilitating RTW for person with disabilities (including SCI's) and why?
9. Do you have any other comments or input that you want to share on this topic, RTW for clients with SCI's/physical disabilities?
10. Can I please contact you should I need clarity or further information?

Thank you so much for your time.

## Appendix C1–C3: Information leaflets and informed consents

### English:

Title: Exploring barriers and facilitators to return to work for clients with Spinal Cord Injuries.

Reference: S14/05/118

Principal Researcher: Sharon N. Ngemntu

Contact Numbers: 082 6744004

You are being invited to take part in a research project. Please take some time to read the information presented here, which explain the details of this project. Please ask any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied or that you clearly understand what this research entails and how you could be involved. Also, your participation is entirely voluntary and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the Ethics Committee for Human Research at Stellenbosch University and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical Research Council (MRC) Ethical Guidelines for Research.

The contact details of the Research Ethics Committee (REC) are, as follows, 021 9389657.

Study monitors or auditors or REC members may need to inspect research records.

1. What is this research all about?

The study will be exploring barriers and facilitators to return to work for clients with Spinal Cord Injuries (SCI's).

The study hopes to identify effective strategies that could be implemented with clients who receive rehabilitation in order to improve possibility to return to work.

The researcher has identified from clinical experience that clients with Spinal Cord Injuries have challenges with returning to work.

The Researcher will do semi-structured interviews with Occupational Therapists (OT's) at different facilities; also do semi-structured interviews with clients (SCI's) and their managers or supervisors.

Participants will be interviewed at the place of their choice and convenience.

2. Why have you been invited to participate?

You have been invited to participate in this study because you have been identified as a best informant for the study. You are either a client living with SCI, a Manager/Supervisor of the client participating in the study; an Occupational Therapist involved / have experience in the rehabilitation of SCI's and/or return to work.

3. What will your responsibilities be?

As the informant you are only requested to answer questions as honestly as possible, knowing that the information shared will be kept confidential from other informants. It will be stored under the code so as to hide the informants' personal details.

You will be asked questions related to SCI and return to work. The interview will take approximately 45 to 60 minutes and it will be done at the place and time of your convenience.

4. Will you benefit from taking part in this research?

The information gained from this study will assist therapists when planning treatment for future clients with SCI's and, facilitating their return to work.

5. Are there any risks involved in your taking part in this research?

This study may evoke certain emotions when answering questions but the Researcher will intervene and allow the informant to recover and, after the interview, refer the informant for necessary intervention as necessary.

6. How will the research related injury be managed and, who to contact in the event of a research related injury?

There is no injury expected while participating in the study. However, should the participant/s sustain injury during the participation in the study, they will be taken to the nearest health facility. The emergency contact number to be used is 10177.

Then the Principal investigator can be informed about the incident.

7. Who will have access to your medical records?

Only the Researcher and Research Assistants will have access to medical records. As said before informants' identity will remain anonymous.

8. Will you be paid to take part in this study and are there any costs involved?

The informants will not be paid for participating in the study. They will be interviewed at the place of their own choice and time. Return transport fare will be refunded to the informant by the Researcher, if the informant will be required to travel away from where they work or stay for the interview.

Please contact me should you require more information.

### **Declaration by participant:**

By signing below, I ..... agree to take part in a research study entitled: Exploring barriers and facilitators to return to work for clients with SCI's.

I declare that:

- I have read this information and it has been explained to me. The consent form is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions and all my questions have been adequately answered.
- I understand that taking part in this study is voluntary and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished, if the researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Signed at (place) ..... on (date) ..... 20.....

.....

Signature of participant \_\_\_\_\_

Signature of witness \_\_\_\_\_

### **Declaration by investigator**

I (name) ..... declare that:

- I explained the information in this document to .....
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above

Signed at (place) ..... (date)

.....

Signature of investigator \_\_\_\_\_

Signature of witness \_\_\_\_\_

### **Declaration by interpreter:**

I (name) ..... declare that:

I assisted the investigator (name) ..... to explain the information in this document to (name of participant)

..... using the language medium of

Afrikaans/Xhosa.

- I encouraged him/her to ask questions and took adequate time to answer them.
- I conveyed a factually correct version of what was related to me.
- I am satisfied that the participant fully understands the content of this informed consent document and has had all his/her questions satisfactorily answered.

Signed at (place) ..... on (date)

.....

Signature of the interpreter:

.....

Signature of the witness:

.....

## Afrikaans

Inligtingsblad oor die studie

Titel: Exploring barriers and facilitators to return to work for clients with Spinal Cord Injuries.

Verwysing: S14/05/118

Hoof Navorser: Sharon N. Ngemntu

Kontak Nommers: 082 6744004

U word genooi om aan 'n navorsingsprojek deel te neem. Neem asseblief u tyd om die inligting, wat die detail van hierdie projek verduidelik, te lees. Vra asseblief die navorser of assistente enige vrae oor enige deel van hierdie projek wat u nie ten volle verstaan nie. Dit is baie belangrik dat u ten volle tevrede dat u a duidelik verstaan wat hierdie navorsing behels en hoe u betrokke kan wees. U deelname is ten volle vrywillig en is vry om deelname te weier. Indien u weier, sal dit u geensins op enige hyse benadeel nie. Dit staan u ook vry om te enige tyd van die studie te onttrek selfs al stem u in om deel te neem.

Hierdie studie is goedgekeur deur die Etiese Komitee vir Menslike Navorsing by Stellenbosch Universiteit en sal uitgevoer word volgens die etiese riglyne an beginsels van die Internasionale Verklaring van Helsinki, Suid-Afrikaanse Riglyne vir Goeie Kliniese Praktyk en die Mediese Navorsingsraad (MNR) Etiese Riglyne vir Navorsing.

Die kontakbesonderhede van die Navorsing Etiese Komitee (NEK) is as volg: (021) 9389657.

Die studie monitors, auditeure of NEK lede mag moontlik die studierekords inspekteer, indien nodig.

1. Wat behels hierdie studie?

Die studies al die hindernisse en fasilitators tot terugkeer werk toe vir kliente met spinalkoord beserings ondersoek.

Die studie hoop om effektiewe strategieë te identifiseer wat implementeer kan word wat met kliente wie binne-pasiente fisies rehabilitasie ontvang om sodoende die moontlikheid vir terugkeer werk toe te verbeter.

Die navorser het identifiseer dat kliente met spinaalkoor beserings uitloegings en swak potensiaal het om terug te keer werk toe.

Die navorser sal fokus groepe hou met die arbeidsterapeute by WCRC en in-diepte onderhoude voer met kliente met spinaalkoor beserings en hul bestuurders of toesighouers.

Kliente en bestuurders of toesighouers sal onderhoude mee gevoer word by a plek van hul keuse en gerief.

2. Waarom is u genooi om deel te neem?

U is genooi om deel te neem omdat u of 'n klient met spinaalkoor besering of 'n arbeidsterapeut wie by WCRC werk of 'n bestuurder/toesighouer van die klient wie deelneem aan die studie is. U is identifiseer as 'n beste informant vir die studie aangesien u direk geaffekteer is deur spinaalkoor besering of voorafgenoemde kliente behandel het of oor bogenoemde toesig gehou het voor of na die besring.

3. Wat sal u verantwoordelikhede wees?

As die informant word u slegs versoek om vrae so eerlik as moontlik te antwoord, wetende dat die inligting wat gedeel word vertroulik gehou sal word van ander informante.

Dit sal ander 'n kode gestoor word om sodeerde informante se persoonlike inligting geheim te hou.

U sal vrae verwant aan spinaalkoor besering en terugkeer werk toe gevra word.

4. Sal u voordeel trek uit deelname aan hierdie navorsing?

Die inligting wat uit hierdie studie verkry sal word, sal toekomstige kliente met spinaalkoor beserings bevoordeel in beplanning van hul behandeling en fasiliteit van terugkeer werk toe.

5. Is daar enige risiko verbande aan 'n deelname aan hierdie navorsing?

Hierdie studie mag sekere emosies antlok wanneer u vrae beantwoord, maar die navorser sal ingryp en die informant toelaat om te herstel en na die onderhoud die informant verwys vir intervensie soos benodig.

6. Hoe sal die navorsing verwante besering hanteer word en wie behoort gekontak te word wanneer daar 'n navorsing verwante besering voorkom?

Indien die deelnemer 'n besering opdoen tydens deelname van die studie, sal 'n ambulans op 10177 geskakel word of die deelnemer sal na die naaste openbare gesondheidsfasiliteit geneem word. Indien die incident egter in die afwesigheid van die hoof navorser gebeur, moet sy so gou as moontlik van die incident in kennis gestel word.

7. Wie sal toegang he tot u mediese rekords?

Slegs die navorser en navorsing assistente sal toegang tot mediese rekords he. Soos voorheen genome, sal informante se identiteit anoniem bly.

8. Sal u betaal word om aan hierdie studiedeel te neem en is daar enige koste aan verbande?

Die deelnemers sal nie betaal word vir deelname aan die studie nie. Onderhoude sal met hulle gevoer word op 'n plek en tyd van hul keuse. Retoer vervoerkoste sal aan die informant betaal word deur die navorser indien die informant nodig het om van hul werk of blyplek te reis vir die onderhoud.

Kontak my asseblief op hierdie nommer 021 4044404 of 0826744004 gedurende werksure as u meer inligting benodig.

### **Verklaring deur deelnemer**

Deur hieronder te teken stem ek ..... in om deel te neem aan 'n navorsing studie getiteld: Exploring barriers and facilitators to return to work for clients with SCI's.

Ek verklaar dat:

- Ek het hierdie inligting en toestemmings vorm, gelees op dit is aan my verduidelik en dit is geskryf in 'n taal waarin ek vlot en gemaklik is.

- Ek het die geleentheid gehad om vrae te vra en al my vrae is bevredigend beantwoord.
- Ek verstaan dat deelname aan hierdie studie vrywillig is en dat k nie forseer is om deel gedwing.
- Ek mag kies om die studie te eniger tyd te verlaat en ek sal nie benadeel.
- Ek mag gevra word om die studie te verlaat voor dit voltooi is, as die navorser voel dit is in my beste belang of as ek nie studieplan volg soos ooreengestem nie.
- Ek het die inligting in hierdie document verduidelik aan .....
- Ek het hom/haar aangenodig om vrae te vra en voldoende tyd geneem om dit te beantwoord.
- Ek is tevrede da thy/sy al die aspekte van die navorsing, soos hierbo bespreek, voldoende verstaan.

Geteken te (plek)..... Op(datum)

.....

Handtekening van navorser: \_\_\_\_\_

Handtekening van getuie : \_\_\_\_\_

## IsiXhosa

Ulwazi olubanzi ngoluphando

Uphando: Exploring barriers and facilitators to return to work for clients with SCI's

Inombolo yophando: S14/05/118

Umphandi oyintloko: Sharon N. Ngemntu

Imfonomfono: 0826744004 (ngexesha lomsebenzi)

Uyamenywa ukuba uthathe inxaxheba koluphando. Thatha ixesha lakho ufunde zonke inkcukacha ngalo. Ungabuza yonke imibuzo onayo kumphandi omkhulu okanye kubancedisi bakhe ukuze wazi yonke into ofanele uyazi nokuba ungathatha inxaxheba kanjani.

Xa uthe wathatha inxaxheba waze wagqiba ekubeni uyeke phakathi lungeka gqitywa uphando akukho ngxaki ozakuba kuyo.

Olu phando lugunyazisiwe yi Ethics Committee ye Dyunivesithi yase Stellenbosch. Luzahamba ngokwe miqathango ka Helsinki kunye ne Kampani enikeza imvume yophando ngeZempilo.

Ungaqhagamshela I Komiti yophando yase Dyunivesithi yase Stellenbosch, kwezii nombolo zilandelay, 021 9389657.

Kwaye leKomiti isenothumela abahloli bazohlola iincwadi zoluphando.

### 1. Lungantoni oluphando?

Kuphandwa ngezinto ezithi zithintele okanye zincele izigulane ezilimele emqolo zikwazi ukubuyela emsebenzini.

Ukuze kufumaneka ulwazi ngendlela ezinokuthi zisetyenziswe ekunyangeni abantu abalimele emqolo bakwazi ukubuyela emsebenzini.

Umphandi uthe kuba ebesebenza ngabantu abalimele emqolo waqwalasela ukuba ixesha elininzi bafumana ubunzima okanye bangakwazi ukubuyela emsebenzini.

Umphandi uzakubuzisa imibuzo kubantu abalimele emqolo, kubantu ababanyangayo nakubaqeshi okanye abaphathi bezizigulane.

2. Ukhethwe kanjani njengomnye wabantu abazathatha inxaxheba koluphando? Ukhethiwe wena ngenxa yoba ungomnye wabantu abalimele emqolo, okanye ungemnye wabantu abanyanga abantu abalimele emqolo okanye ungumqashi or ungumphathi wabanye babantu abathatha inxaxheba koluphando.

3. Ziintoni okufuneka uzenzile njengoba uzathatha inxaxheba koluphando? Kufuneka uphendule imibuzo ngokugqibeleleyo, unyaniseke. Uze wazi ukuba yonke into oyithethayo izagcinwa emfihlakalweni. Uzabuzwa ngolimala kwakho emqolo, ngomsebenzi wakho. Sizakuthatha ixesha elingazukugqitha kwiyure enye. Ingxoxo azizukugqitha kwimizuzu engamashumi asithoba (90) Sizakuza kuloo ndawo uhlala kuyo okanye emsebenzini naphina apho kuzafikeleleka lula kuwe ngexesha elikhethwe nguwe.

4. Zizakubayintoni iziqhamo ngokuthabatha inxaxheba koluphando? Iinkcukacha ezizavela koluphando zizakongeza ulwazi oluzakunceda kwabo basebenza kwiziko lokuchachela abantu abalimele emqolo ukuze linyuke izinga lababuyela emsebenzini kubantu abalimele emqolo.

5. Zeziphi iingozi endinodibana nazo ngothatha inxaxheba koluphando? Ungavuseleleka iintlungu zomphefumlo kuba kuzafuneka uthethe ngokulimala kwakho. Kodwa ke umphandi uzakunika ixesha uthethe ngendlela oziva ngayo aze akuthumele kunoNtlalontle okanye kugqirha wengqondo ukuze unikwe unyango olufanelekileyo. Xa athe ubani wafumana ukulimala ethabatha inxaxheba koluphando, makasiwe kwiziko lempilo elikufutshane likarhulumente. Okanye nitsalele inqwelo yezigulane (Ambulensi) kule nombolo, 10177. Nize nazise umphandi ntloko ngeso sehlo.

6. Ngubani ozakunikwa imvume kwiinkcukacha zokugula nokulimala kwam?  
Ngumphandi oyintloko nabancedisi bakhe.

Umphandi nabancedisi bakhe kunyanzelekile bejonge iinkcukacha zokulimala kwakho kumacwecwe asesibhedlele.

7. Uzabhatalwa na ngokuthi uthathe inxaxheba koluphando?  
Hayi, awuzobhatalwa ngothatha inxaxheba koluphando. Umphandi nabancedisi bazakundwendwela endlini okanye ekhayeni lakho okanye emsebenzini ngokobona kwakho.

Kodwa ukuba kuye kwanyanzeleka usebenzise imali yakho wakhwela ukuzodibana nomphandi, imali yakho izabuyekezwa.

Nditsalele umnxeba kweezinombolo zemfonomfono 021 4044404 okanye 0826744004, ngamaxesha omsebenzi, xa ufuna ulwazi olongezelekileyo.

### **Isivumelwano sothabatha inxaxheba koluphando:**

Mna( Igama) ..... otyikitye ngezantsi, ndiyavuma uthatha inxaxheba koluphando: Exploring barriers and facilitator to return to work for clients with SCI's.

Ndiyazivuma ezizinto zilandelayo:

- Ndazi kabanzi ngoluphando kwaye ndiyifumene inkcazelo endonelisekileyo yiyo kwaye ichazwe ngolwimi lase khaya.
- Ndibuzile imibuzo ndoneliseka nangempendulo endizinikiweyo.
- Ndithatha inxaxheba ngemvume yam kwaye khange ndiqweqwediswe ndoyikiswe ukuze ndithathe inxaxheba.
- Ndingayeka ukuthatha inxaxheba na nini na ndifuna akukho nto izakwenzeka kum okanye ndiphathwe kakubi ngenxa yaloo nto.
- Kwaye ndingayekiswa ukuthatha inxaxheba na nini na xa umphandi ethe wabona kufanelekile enze njalo.

Ityikitywe (indawo) ..... ngolusuku nenyanga

.....

Umthathi nxaxheba .....

Ingqina lakhe .....

Mna mphandi (igama) .....

Ndiyavuma ukuba ndinikeze ulwazi oluphangaleleyo ngoluphando ku

.....

Ndimnikile ithuba lokubuza imibuzo ndaze ndamnika iinkcukacha ezipheleleyo.

Ndonelisekile ukuba uyayiqonda into eyenzekayo malunga nothatha inxaxheba

koluphando njengoba senditshilo ngaphambili.

Ityikitywe (kulendawo) ..... Umhla:

.....

Tyikitya(umphandi)

.....

Tyikikitya (Ingqina)

.....

## Appendix D: South African Policies and provisions for people with disabilities:

Policy/Framework	Interpretation and, provisions for people with disabilities
EEA(1998)	To eliminate discrimination in employment and promoting occupational equity. It protects PWD's from unfair discrimination on the grounds of disability and entitles them to affirmative action measures.
Code Of Good Practice, Reviewed in 2014	The aim of the Code (of Good Practice) is to guide, educate and inform employers, employees and trade unions to understand their rights and obligations, to promote and encourage equal opportunities and fair treatment of PWD's. It is intended to help employers and employees understand their rights and obligations in order to promote certainty and reduce disputes to ensure that people with disabilities can enjoy and exercise their rights at work. This is a guide for employers and employees on promoting equal opportunities and fair treatment for PWD's as required by the Employment Equity Act (EEA).
Technical Assistance Guidelines (TAG's), August 2002	The TAG's set out practical guidelines and examples for employers, employees

	<p>and trade unions on how to promote equality, diversity and fair treatment in employment through elimination of unfair discrimination.</p> <p>It is aimed at both the employers and PWD's. The employers need to understand their obligations, to guard against discrimination of PWD's while they are generating income or viable enterprises. To understand opportunities provided to them for employing PWD's as well as application of non-discrimination and affirmative measures for potential and existing employees.</p> <p>All employers should reasonably accommodate the needs of PWD's</p> <p>Reasonable Accommodation should start during recruitment and throughout the employment process. Accommodation must remove the barriers to performing the job (minimum requirements) for a person who is otherwise qualified.</p> <p>Conditions that may affect accommodation include the degree and nature of impairment, requirement and type of accommodation as well as the nature of the job or the work environment. Reasonable</p>
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	<p>Accommodation can be temporary or permanent depending on the type or the progressive nature condition.</p>
Occupational Health and Safety Act	<p>Occupational health services are recognized as being one of the most effective resources for managing sickness absence, particularly where this absence has a long-term nature. The responsibility for managing and organizing their provision often falls to the human resources or personnel department of the organization. The provision of the services is often related to the size of the organization and the nature of the business they undertake. The services may be delivered by an external provider under a contractual arrangement or sometimes they are brought in on an ad-hoc basis, as and when they are needed. Less frequently, a company has its own occupational health doctor or nurse, and larger organizations may have an in-house occupational health department. More common, the services include pre-employment health screening, general health surveillance and health promotion amongst the</p>

	<p>workforce, ensuring compliance with health and safety regulations, addressing sickness absence, monitoring different parts of the organization for work-related stress and any other hazards and risks in the work place, rehabilitation or re-deployment, and advising on ill-health retirement. The service may also extend to providing counselling and advice on ergonomic practices and workstation design and layout, (Ross, 2007).</p> <p>Very occasionally, OT's can be found in occupational health teams in UK. They secure their position by gaining an additional qualification, in either occupational health or in ergonomics. There is a growing need to maintain people's functional abilities at work; adapting the environment of the workplace or the demands of the work tasks so as to accommodate individuals' particular needs.</p>
<p>Compensation for Occupational Injuries and Disease Act (COIDA)</p>	<p>If an employee sustained injury or contracted disease at work resulting in disablement or death, such employee or dependents are entitled to benefits provided by this act.</p>

The Skills Development Act, 1998	To improve the employment of persons previously disadvantaged and to redress those disadvantages through training, education and learnerships. To help PWD's access formal employment, to become self-employed and self-sufficient.
The Labour Relations Act, 1998	Provision of unfair labour practices. Stipulations on unfair discrimination towards PWD's.
The Promotion of Equality and Prevention of Unfair Discrimination Act, 2000	To address discrimination and promote equality. Non-discrimination against any person on the grounds of disability including denying or removing an enabling facility necessary for PWD's functioning in society.
INDS, 1997	To promote non-discriminatory development planning, programme implementation, and service delivery. Government departments to formulate their disability policies and strategies in line with the provisions of the INDS.
The Social Assistance Act and Disability Grants, 1992	To provide for uniformity of, equality of access to, and effective regulation of, social assistance throughout South Africa. PWD's benefitted through disability grants. The DG is a critical component of the SA's

	<p>social security system and plays a role in reducing poverty among people living with HIV. It also provides financial assistance to people who are deemed disabled and therefore unable to seek or sustain employment. It aims at relieving the living conditions of people with disabilities and health constraints but is also an important measure in the fight against poverty. The recipients generally belong to the black African population, which also tends to have lower levels of formal education. It absorbs those who are already excluded from the labour force (J int AIDS, 2012).</p>
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## Appendix E: Landrum's rehabilitation outcome levels

### REHABILITATION OUTCOME LEVELS

Rehabilitation outcome levels provide a guideline for a generic pathway that can be used in the rehabilitation of all disabilities to ensure a systematic case management from the time the injury or illness has occurred to the final outcome (Landrum, Schmidt & McLean 1995).

Advantages:

- Improved goal-setting
- Assist with prioritizing
- Ensuring continuum of care
- Improve client outcomes
- Provide clear pathway of care
- Increased cost effectiveness
- Improved resource management
- Providing a way to describe and classify clients
- More effective time utilization

### 0-PHYSIOLOGICAL INSTABILITY

This is immediately after injury or illness has occurred, when the person is hospitalized and their medical condition is not managed. This could occur as a result of secondary complications, for example, bladder retention or development of pressure ulcer.

### 1-PHYSIOLOGICAL STABILITY

Medical management has been managed but not resolved. The focus is on prevention of secondary complications.

### 2-PHYSIOLOGICAL MAINTENANCE

There is still limited self-care, mobility and communication but might be able to do basic bed mobility and transfers, depending on patient's capability.

### 3- RESIDENTIAL REINTEGRATION

This is identified by acceptable function within long-term residence. The family or caregiver needs to assist with functional tasks at home or nurses at the rehabilitation facility can assist but the patient must direct them.

#### 4 -COMMUNITY REINTEGRATION

At this functional outcome is characterized by the following; the person is managing their own personal affairs, they are socially competent, able to do community mobility, able to do complex home management activities, they are able to participate in recreational activities and are able to do self-directed health monitoring.

#### 5- PRODUCTIVE ACTIVITY

Appropriate to stage of life and interests; these can be vocational, avocational or educational. Work assessment, vocational training, work visit and job analysis and reasonable accommodation as well as employer education; school visit to do accessibility assessment as well as teachers and learners' sensitivity training.