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EARLY INTERVENTION IN VOCATIONAL REHABILITATION OF PERSONS WITH ACQUIRED DISABILITIES

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SUMMARY

There are many scenarios that can lead to disabilities and its manifestation can have a large number of varieties including the type of disability, the degree of visibility of the disability, course of the condition and experience of pain and other symptoms. Acquiring a disability is extremely difficult experience and person sudden exists in different world comparing with ones before acquiring disability. Changes can occur in physical, mental, social, vocational and family functioning. Rehabilitation often begins in the hospital setting. The goals of rehabilitation are to help persons with acquired disabilities achieve maximum functional independence as much as possible and to attain the best possible quality of life and life satisfaction.

In this article is discussed importance of early intervention in vocational rehabilitation. Evidence suggest that early intervention in vocational rehabilitation is more effective than late. Early intervention strategies lead to faster return to work. The timing of the interventions play a key role in returning to vocational activities. Recent researches have showed that early rehabilitation is more associated with factors that usually predict better health and better job satisfaction, such as a permanent job, high occupational status, good job control, low job insecurity, and healthy lifestyle.

Key words: early intervention, vocational rehabilitation, acquired disability, return to work

INTRODUCTION

Increasing of industrialization and motorization have led to increasing the number of accidents occur at work and in the traffic. The most injuries that happen are traumatic brain injury, spinal cord injuries, upper and lower extremities injuries.

Survive of victims of severe accident is increased due to the development of medicine. Rehabilitation process is aimed at enabling persons with acquired disability to reach and maintain their optimal physical, sensory, intellectual, psychological and social functional levels. Rehabilitation provides disabled people with the tools they need to attain independence and self-determination. Additional, this group of people represent group with specific problems in terms of reintegration into society, school or work.

Keeping employees at work and helping them get back to work as soon as possible after an absence can help maintain their health and wellbeing while also maximising productivity. The economic costs of absence from work are an important reason for undertaking various measures that employees who acquired disabilities return to work as soon as possible. Estimates suggest that the costs of injuries total tens or even hundreds of billions of dollars per year (Leigh et al., 2000). The costs associated with

workplace injuries can be substantial for both injured workers and employers. Workers suffer both economic and noneconomic hardships that can persist for years. Employers must pay medical and indemnity benefits, lose worker productivity, and often bear the costs of replacing the lost worker. Furthermore, costs of absence from work have significant impact to persons and their family related to less physical, social and psychological well-being (Hammell, 2007; Krause et al., 2001; McKee-Ryanet al., 2005).

Vocational rehabilitation represents integral part of national strategies for minimizing absence from work, disabling, employment and enabling. Vocational rehabilitation have economical rationale. In the case when it is not possible, vocational rehabilitation have to be therapeutic provision focused to social rehabilitation (Odović, 2005).

Injury outcomes are different and require team work. Experts must have basic knowledge related to injury consequences, necessary rehabilitation provision and other kind of help adapted to time and stages of injuries.

1. Professional rehabilitation

Chan et al. (1997) defined vocational rehabilitation as:

"*a dynamic process consisting of a series actions and activities that follow a logical, sequential progression of services related to the total needs of a person with a disability. The process begins with the initial case finding or referral, and ends with the successful placement of the individual in employment. Many activities and developments occur concurrently and in overlapping time frames during this process*" (p. 312).

Some authors deem that there are changes in understanding of effective rehabilitation achieving and workplace was recognised as key factor of employee recovery. Because of that rehabilitation should be focused on tasks required by work with appropriate treatment and activities that encourage restoration of work – related functions. In that sense Hanson et al. (2006) deem that vocational rehabilitation includes multidimensional methods for attainment of work or return to work as outcome for employees with injury or illness which have led to out of work. These methods include workplace intervention.

Verbeek (2006) believes that vocational rehabilitation can be an old term for what today would be called return to work after an illness or injury, or as a work (re) integration for workers with limitations in performing activities.

The primary goal of vocational rehabilitation is to assist individuals with disabilities gain or regain their independence through employment or some form of meaningful activity and reintegration into society (Parker & Szymanski, 2003).

The final goals are:

- preventing potential disability;
- returning workers with disabilities to gainful employment;
- introducing individuals with disabilities into the labor force; and
- keeping workers with illness and disabilities employed (Jenkins, Patterson & Szymanski, 1998).

Vocational rehabilitation includes services for facilitating and supporting the return to work. Lee (2010) stated that typical services include:

- vocational assessment and evaluation,
- vocational training,

- general skills upgrading,
- refresher courses,
- career counselling,
- on-the-job training program,
- job search, and
- consultation with employers for job accommodation and modification.

These service delivery processes are not the same for people with certain disabilities and may vary depending on the needs of the person. It is necessary to take into account personal, educational, and environmental factors during the process (Lee, 2010).

Vocational rehabilitation principles and interventions are fundamentally the same for work related and other comparable health conditions, irrespective of whether they are classified as injury or disease. The guiding principles of quality vocational rehabilitation[a] are:

1. Vocational rehabilitation should be initiated without delay and proceed in conjunction with medical treatment and physical rehabilitation to restore the worker's capabilities as soon as possible.
2. Reasonably necessary vocational rehabilitation assistance will be provided to overcome the immediate and long-term vocational impact of the compensable injury, occupational disease or fatality.
3. Successful vocational rehabilitation requires that workers be motivated to take an active interest and initiative in their own rehabilitation. Vocational programs and services should, therefore, be offered and sustained in direct response to the commitment and determination of workers to re-establish themselves.
4. Maximum success in vocational rehabilitation requires that different approaches be used in response to the unique needs of each individual.
5. Vocational rehabilitation is a collaborative process, which requires the involvement and commitment of all concerned participants.
6. Effective vocational rehabilitation recognizes, within reason, workers' personal preferences and their accountability for independent vocational choices and outcomes.
7. The gravity of the injury and residual disability is a relevant factor in determining the nature and extent of the vocational rehabilitation assistance provided.
8. Where the worker is suffering from a compensable injury or disease together with some other impediment to a return to work, rehabilitation assistance may sometimes be needed and provided to address the combined problems. Rehabilitation assistance should not be initiated or continued when the primary obstacle to a return to work is noncompensable.

Healthcare has a key role in rehabilitation of persons with acquired disabilities, but the evidence shows that treatment by itself has little impact on work outcomes. Generally, effective vocational rehabilitation depends of healthcare focused on work and adaptation of workplace. Vocational rehabilitation should be an integral

a Vocational rehabilitation, Chapter 11, Rehabilitation Services and Claims Manual Volume II. Retrieved from http://www.worksafebc.com/publications/policy_manuals/rehabilitation_services_and_claims_manual/volume_ii/default.asp

part of healthcare and workplace interventions and is not necessarily second-stage intervention (Waddell, Burton & Kendall, 2008).

The concept of early intervention is central to vocational rehabilitation. If person is the longer off work vocational rehabilitation becomes more difficult and the obstacles to return to work are greater. It is simpler, more effective and cost-effective to prevent long-term sickness absence. In that sense Waddell, Burton & Kendall (2008) stated a 'stepped-care approach' which starts with simple, low-intensity, low-cost interventions which will be adequate for most sick or injured workers, and provides progressively more intensive and structured interventions for those who need additional help to return to work. This approach allocates finite resources most appropriately and efficiently to meet individual needs. Effective vocational rehabilitation depends on communication and coordination between the key players – the individual, healthcare, and the workplace.

2. Acquired disability

There are many scenarios that can lead to disability and each of them can, but doesn't have to, refer to types or work condition in which person is involved. As illustration, it should be stated:

- progressive illness or condition which lead to long – term absence from work, for example, arthritis, progressive eye-sight loss, diabetes, asthma, cancer, back pain and other conditions;
- sudden onset of the disease or condition which lead to long – term absence from work for example, heart attack or pneumonia, or
- traumatic accident or event that lead to illness, injury or impairment that requires surgery and therapy and is therefore related to the long-term absence from work; events that lead to this are sport recreation, traffic accidents and workplace – related accidents.

In general terms, there are many ways that can lead to disability during life and its manifestation can have a large number of varieties including the types of disabilities (sensory, motor, or cognitive), the degree of visibility of the disability, course of the condition (constant, relapsing, or progressive) and the *experience* of pain or other symptoms.

Acquiring a disability is extremely difficult experience which leads to life-changing. Person sudden exists in different world comparing with ones before acquiring a disability.

Disability places a set of extra demands or challenges on the family system. Many of these challenges cut across disability type, age of the person with the disability, and type of family in which the person lives. Family life is changed, often in major ways. Care-taking responsibilities may lead to changed or abandoned career plans. Family perceived greater financial stress, frequent disruption of family routine and leisure and social roles are disrupted because often there is not enough time, money, or energy to devote to them (Singhi et al., 1990).

The chain of psychological reactions starts with acquisition of disability and represents special case of coping with traumatic event in life (Livneh, 2001). Depending

of nature of acquired disability, person's life may be changed on a way that she/he early could not imagine. This new way of existence, this new culture is suprising and represents big challenge. Possible pain and rehabilitation should be added to this.

Adjustment to acquired disabilities were defined as personal and high individualized response on disability or disorders due to illness in wide range of life domains (Bishop & Allen, 2003). These disorders may be experienced, for example, in interpersonal relationships, in interaction with physical environment and as changes in psychological or emotional health and function.

In the early stages of adaptation, the changes that happen in person`s life and families may seem tolerable–at least while person still think there is a chance that the diagnosis is wrong. Feelings move from anger to depression rather than progress through one stage and into the next. Depression often occurs during the adaptation process, and may happen at other times or continue. The initial period of adjustment after a disability or illness almost always requires going through each of the stages. It can take a long time for some to arrive at adaptation, and not everyone in a family gets there at the same time. With a lot of support, good communication, and teamwork, the process will likely resolve in time for most people.

Livneh and Antonak (1997) define psychosocial adaptation to chronic illness and disability as the final phase of an adaptation process during which the individual achieves a state of reintegration, positive striving to reach life goals, positive self-esteem and demonstrating positive attitudes toward oneself, others and disability.

Psychological adjustment to acquired disabilities has been viewed in the literature as a sequential process involving three to five naturally occurring stages (Bracken, Shepard & Webb, 1981; Stewart, 1977). Stage theories often suggest that psychological difficulties are a natural response when persons undergo grieving processes. In that sense, Stewart (1977) proposed a three-stage model of coping and adaptation that included (a) denial, (b) depression, and (c) moratorium/restitution (a stage typically marked by some form of acceptance of the disability). Stage models assume a linear process following a discrete event. However, disability is an experience that may be lifelong, that may arise suddenly, or may have a gradual onset, or that may gradually intensify. More holistic approaches would be helpful, as are models that place a decreased emphasis on the assumption of the necessity of grief and depression as the critical psychological phenomena that define well-being in disability. Finally, as long as adjustment to the disability remains the focus of this area of work, it may be difficult to shift from a preoccupation with persons with disabilities as differing from and therefore worse off than nondisabled persons, but actively seeking to re-approach their pre-disablement functioning.

It is clear that adaptation to disability is a complex process depending on many parameters, which determine whether or not an individual will accept his/her disability and socially re-integrate, negotiating his/her new identity and roles in personal and social level (Psarra & Kleftaras, 2013).

3. Early intervention in vocational rehabilitation

Rehabilitation often begins in the hospital setting. The goals of rehabilitation are to help persons with acquired disabilities achieve maximum functional independence as much as possible and to attain the best possible quality of life and life satisfaction.

Vocational success has significant implications for life satisfaction after acquiring disability. Melamed et al., (1992) claimed that decreased life satisfaction has been associated with unemployment, and with passive uninvolved lifestyles following acquired brain injury. Life satisfaction following acquired brain injury seems to be directly related to employment and social integration (Corrigan et al., 2001). In that light it seems essential that vocational rehabilitation be part of early medical rehabilitation process.

As stated in Vocational Rehabilitation and Employment (Disabled Persons) Recommendation "Vocational rehabilitation should be started as early as possible. For this purpose, health-care systems and other bodies responsible for medical and social rehabilitation should co-operate regularly with those responsible for vocational rehabilitation."[b]

In the earlier literature Fawber and Wachter (1987) contended that vocational intervention is also appropriate in medical rehabilitation. They recommended a treatment-oriented job placement process that seeks to distribute responsibility for employment outcomes among all interdisciplinary team members throughout the entire medical-vocational rehabilitation continuum. The important benefit of aggressive vocational programming within the overall operation of any medical rehabilitation treatment program is its capacity to provide direction, focus, and meaning to other therapies or services.

Odović (2005) suggests when it is possible vocational rehabilitation process should be start during medical rehabilitation services but taking into account recommendations of *physician*. In that light it is very important ensure cooperation between institution for medical rehabilitation services and vocational rehabilitation institution. Furthermore this cooperation would enable identification of persons who need career orientation and vocational training, would enable medical counselling during vocational rehabilitation process and if it is necessary it would assure purchasing of orthotic or prosthetic device.

Evidence suggests that early vocational rehabilitation and medical rehabilitation care close to the patient's home improve long – term recovery[c]. On other side, prolonged staying in rehabilitation services centers keep patients from returning to their home, may delay community reintegration, and social, vocational and psychological adjustment needed for optimal recovery[d].

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b R168 – Vocational Rehabilitation and Employment (Disabled Persons) Recommendation, 1983 (No. 168). Retrieved from http://www.ilo.org/dyn/normlex/en/f?p=1000:12100:0::NO:12100:P12100_INSTRUMENT_ID:312506

c United States Government Accountability Office, DOD And VA Health Care. Challenges Encountered by Injured Servicemembers during Their Recovery Process. GAO-07-589T, March, 2007. Retrieved from http://gao.justia.com/department-of-veterans-affairs/2007/3/dod-and-va-health-care-gao-07-606t/

d Committee on veterans' affairs, U.S. house of representatives. *Findings of the President's Commission on Care for America's Returning.* Wounded Warriors. One Hundred Tenth Congress September 19, 2007. Serial No. 110–43. Retrieved from https://www.gpo.gov/fdsys/pkg/CHRG-110hhrg39452/pdf/CHRG-110hhrg39452.pdf

Power and Hershenson (1999) stated that three areas must be taken into account when person after injury is in- hospital medical treatment:

- recognition of the emotional reaction to the injury,
- short-term counselling that address emotional and related career – adjustment issues,
- vocational assessment.

3. 1. Recognition of the emotional reaction to the injury

Several factors influence the extent of impact, every chronic illness or disability requires some alteration and adjustment in daily life. Lipowski (2013) stated that the extent of impact is dependent on:

- the nature of the condition
- individual`s pre-illness/disability personality
- the meaning of the illness or disability to individuals
- individual`s current life circumstances
- the degree of family and social support emotional reactions vary, the following are common.

Many variables influence a person's reaction to physical illness or injury. Age, personality, past history, and current life situation; the nature and characteristics of the implicated disease or injury; and the quality of the patient's social and physical environment–all play a part (Lipowski, 1975). It is clearly a *multifactorial process.*

Common emotional reactions to acquired disability are:

- confusion, denial and disbelief,
- anxiety, fear of losing control,
- panic,
- inadequacy and humiliation,
- anger and frustration, resentment,
- sadness and crying,
- guilt,
- helplessness, hopelessness and despair,
- disorganisation,
- fatigue and lethargy,
- loss of interests,
- with drawal,
- loneliness, isolation and abandonment[e].

Emotional aspects associated with a new form of disability are many times a major factor in determining the person's outcome and the benefits related to rehabilitative efforts. Effective psychological intervention is beneficial where ensuring recovery from an injury that has caused a form of disability is concerned. The experience of an injury that leads to a psychological or physical disability is similar to enduring a mourning process and can involve adjustment to the disability the person experiences and may be divided into a series of four stages or tasks:

e McDonald, F. & Lukins, J. Psychosocial Issues Associated with Acquired Disabilities. Retrieved from http://frankmcdonald.net/Psychosocial Issues Associated with Acquired Disabilities_Web.ppt.

- shock,
- denial,
- anger/depression, and
- adjustment/acceptance (Taormina-Weiss, 2012).

Psychological intervention such as cognitive behavioral therapy can help a person with a new form of disability to progress through the stages of disability and assist them with resolving any difficulties they may experience along the way. The result can be an increase in the person's self-esteem and confidence. Cognitive approaches through this form of therapy provide a modality for focusing on core issues in the process of adjustment, helping to reduce the person's tendency to magnify risks related to new activities, as well as helping to change any belief systems the person may have that impede adjustment. The amount of time a person with a new form of disability might spend pursuing cognitive behavioral therapy depends upon the type of disability they experience and the coping ability of the person.

3. 2. Vocational assessment

Vocational assessment is part of the *vocational rehabilitation* process. The purpose of vocational assessment is determination whether an person with acquired disability is able to return to work, and if so, to what kind of work is able to does (Odović, Rapaić, 2012).

It is a broad assessment utilizing information gathered *during* the rehabilitation process and it is dynamic in nature. The *vocational assessment answers general questions* related to plan development and the ability of persons to benefit from rehabilitation programming such as educational course work or vocational training (Whiston, 2000).

The outcome of the assessment is to explore vocational options that will be the basis for a return to work plan. A return to work is the optimal outcome. However, the outcome may indicate work may not be practical and in that case other interventions need to be considered.

Konradsdottir (2011) stated that the work ability assessment can be divided into three phases:

- basic assessment
- special assessment
- re-assessment.

The basic assessment plays a key role in the work ability assessment and is intended to be used in early intervention. Basic assessment is defined as a systematic gathering of information and advice, supervision and encouragement by the vocational rehabilitation consultant. The purpose is to promote health, improve social conditions and motivate early return to work if possible. The method is based on a process in which the vocational rehabilitation consultant, in collaboration with the individual, explores what skills the individual has or can develop and the opportunities to use them in the labor market. In the basic assessment detailed information about the overall situation of the individual is gathered and the emphasis is placed on early intervention, activation and to remove barriers to work. The conclusion of the basic assessment is based on this information. The information collected during basic assessment is necessary if further

information gathering and process in the work ability assessment, such as if special assessment is needed.

Special assessment is defined as a detailed analysis and evaluation of options and possibilities of vocational rehabilitation and is done by one or more external experts (for example: doctors, physical therapists, occupational therapists, psychologists and social workers). In the special assessment the individual´s options are explored and evaluated in a more specialized manner than during the basic assessment. On the basis of the special assessment a decision is made whether and how work ability can be further promoted.

Re-assessment is defined as a re-evaluation that occurs when vocational rehabilitation plan from special assessment is completed or has not been as successful as expected. The result of the re-assessment may indicate that vocational rehabilitation should be repeated because the best possible performance has not yet been reached, or that the maximum work ability has been achieved.

3. 3. Emotional and career short-term counseling

Acquired disabilities can lead to changes that include:

- adjusting to an awareness of new limitations of body or mind,
- learning how to deal with possible modification in career plans,
- engaging in a socialization process and more definite life plans be formulated.

In – hospital rehabilitation than becomes a process of assisting the person to live with the disability in the hospital environment and helping her/him to prepare to follow career option. It means that vocational counseling is another area of intervention that can be done with the persons with acquired disability. Taking into account statement of Power and Hershenson (1999) it can be said that some of the counseling goals in this phase are:

- assisting the person to understand the emotional reaction to the disability and to learn how to deal with any negative reactions that can be developed for vocational opportunities,
- identifying personal resources such as educational background, work experience, vocational interests, etc.,
- educating the person with disability to develop effective coping mechanism and to set appropriate priorities for each (assertive responses, relaxation procedures, redefinition of personal, social, and vocational goals and possible solving techniques).

Vocational counseling can be a process that occurs during the different rehabilitation phases. For instance, in an earlier phase, information gathered from the different assessment processes (standardized and paper-pencil testing) can be used to help the individuals to understand their interests, values, needs, and direction of their vocational pursuit (Lee, 2010). In addition, vocational counseling can be used to educate the individuals in understanding the availability, specific nature, strengths and limitations of a job requirement (e.g., job analysis, labor market survey, and transferrable skills analysis).

4. Research regarding effectivity of early intervention in vocational rehabilitation

A number of recent studies indicate that the timing is important for returning to work and that early intervention is more effective than late.

Early intervention strategies in vocational rehabilitation for those with work loss of short duration lead to quicker return to work and reduced long-term disability (Haldorsen et al., 2002).

The timing of the interventions play a key role in returning to vocational activities. Buffington and Malec (1997) found patients who received vocational services within the first 12 months post injury had more opportunities and found independent job placements more quickly than those who received the same services more than 12 months post injury. This study suggests that vocational rehabilitation strategies should be implemented as early as possible to improve the likelihood of successful vocational reintegration. Main & Haig (2006) found the success in the return to employment of patients who received occupational therapy service. Authors suggest that this would support the argument for early intervention and speedy placement back into the familiar employment. Also, many of the patients had themselves prioritised return to work as a goal of their rehabilitation and the incorporation of vocational issues in their occupational therapy programme was likely to encourage active participation. Early return to work, where possible, may also avoid long periods of inactivity, with loss of confidence and self-esteem (Main & Haig, 2006).

Vocational rehabilitation interventions have been shown to be ineffective for benefit recipients who have been on benefits or out of work more than 2 years. The available evidence therefore supports the rationale of providing any vocational rehabilitation intervention before people become trapped on benefits (Thornton et al., 2003; Waddell & Aylward, 2005).

The evidence suggests that structured vocational rehabilitation interventions are most effective between about 1 and 6 months sickness absence, though the exact boundaries for the optimal opportunity are unclear. It depends on the context just when the window commences, but as time passes the worker's needs increase. The best evidence on the upper limit for effective interventions is between 3-6 months and there is progressively less evidence for effectiveness between 6-12 months, and very little for interventions after 12 months (Waddell et al., 2003).

The key element that would need to be created afresh is a single claims program that takes all those identified after about six weeks sickness absence and provides a) individual needs assessment, b) signposting to the appropriate help, and c) coordination of healthcare and workplace interventions to facilitate the return to work process (Hanson et al., 2006).

A comprehensive system for the early rehabilitation has been developed and practised within the Finnish State administration since 1989. The rehabilitation process can be initiated as soon as the working capacity of a person or work community is threatened but is not yet seriously impaired. Vaananen-Tomppo, Janatuinen and Tornqvist (2001) evaluated the outcomes and processes of early rehabilitation. The research data comprised several thousands of cases and consisted of a cross-sectional

and a follow-up survey and a register-based follow-up. The surveys showed that during the rehabilitation period the average performance of the participants began to match that of the better-off non-participants, especially with respect to their general working capacity, mental well-being and occurrence of musculoskeletal problems. The sense of coherence rose in both groups, which can be partly attributed to positive changes in the workplace. In the group process, there also proved to be many factors contributing to achievement of the participant`s rehabilitation objectives. The register-based follow-up showed that rehabilitation had a positive effect on average longer-term morbidity. In the cases of early retirement, the average retirement age of early rehabilitation participants was considerably higher than the average for the State sector as a whole. A system of outpatient early rehabilitation, where the rehabilitation programme and the development of working circumstances progress side by side, proved to give encouraging results at very moderate cost.

Marnetoft and Selander (2002) investigated whether early vocational rehabilitation is more effective than rehabilitation initiated at a later stage. The study was based on a sample of 612 individuals on long-term sick leave (90 days or more) who had received vocational rehabilitation. Results have showed that early interventions are more effective than late (every 30 days of inactivity, the probability for successful rehabilitation decreased with 3.8%), and early interventions increase the probability for successful rehabilitation for women, especial for younger women. Traditionally a typical person on long term sick leave was aged 60 or more. Today illhealth is more common among younger people. The diagnoses are also changing, from traditional musculoskeletal problems to mental/psychiatric problems. Since a few years back, young people with mental problems constitute the fastest growing group among the long-term sick. No significant results were shown for men compare to women. Traditionally men have always been over-represented among those on long-term sick leave and those receiving disability pension. A few years ago, this picture changed. Today more women than men are long-term absent from work owing to illhealth.

Saltychev et al., (2011) examined factors that predict the probability of an employee being granted in-patient multidisciplinary rehabilitation to sustain worklife participation. Baseline characteristics were measured from survey responses and registers. Two types of rehabilitation were identified: ***early*** (for employees only at risk of their work capacity deteriorating in the near future) and ***later*** (for employees whose work capacity has already deteriorated substantially). Two main results can be identified in this prospective cohort study of nearly 50,000 employees in the public sector. During the mean 5.0-year follow-up, 1551 participants were granted early rehabilitation and 1293 received later rehabilitation. Firstly, employees with major risk factors for early retirement on health grounds were not more likely to be granted rehabilitation than those with no risk factors. Secondly, early rehabilitation was more likely to be associated with factors that usually predict better health and better job satisfaction, such as a permanent job, high occupational status, good job control, low job insecurity, and healthy lifestyle. Early rehabilitation was predicted by a permanent job, high occupational status, good job control and job security, non-smoking and high physical activity. Both early and later rehabilitation were predicted by the use of painkillers, anxiety, and sickness absence. Later rehabilitation was also predicted by

older age, poor self-rated health, and low educational level. In conclusion authors stated that early rehabilitation and, to a lesser extent, later rehabilitation were more often granted to employees with few known risk factors. This finding suggests that preventive measures to reduce the risk of disability pension amongst high-risk employees through rehabilitation are not targeted as intended.

CONCLUSION

Acquisition of disability is a traumatic experience for the person and often drastically changed her life. Depending on the severity of acquired disability a person's ability to perform vocational duties can be significantly reduced. There are evidence that work is generally good for physical and mental health and well-being. Returning to some form of productive work improves clinical outcomes as compared to passive medical rehabilitation programs.

The nature of the recovery process is highly individualized and requires professional judgment to determine the appropriate time to begin vocational rehabilitation. Vocational rehabilitation should be started as early as possible when person is medically stable. Implementing an early vocational rehabilitation interventions in the hospital setting has good potential for enhancing possibilities for return to work after acquiring disabilities.

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