

SYSTEM OF PREVOCATIONAL REHABILITATION IN THE CZECH REPUBLIC

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Abstract

Prevocational rehabilitation is performed by members of the rehabilitation team to get a functional assessment of the psychosensomotor potential for employment purposes for people with disabilities (patients/clients). Standard methodologies were divided into basic, recommended and special methods for determining the psychosensomotor potential for employment. The functional basic methodologies include: Barthel Index, Instrumental routine daily activities test, Daily structure, Interest questionnaire, Self-assessment of pain, Sensory examination, Work curve by Emil Kraepelin and Richard Pauli, Jebsen-Taylor Test, Purdue-Pegboard test - model 320 20, Jamar Dynamometer, Isernhagen Work System, Loewenstein Occupational Therapy Cognitive Assessment, Activity Matching Ability System, WHO DAS II. The recommended methodologies include examinations by experts that each facility is obliged to ensure, if necessary, for example, targeted and comprehensive assessment, spirometry, speech examination, psychological, psychiatric examination, hearing examination, visual examination. Special methodologies are according specialization of rehabilitation facilities. Our Department of Rehabilitation Medicine is focused on patients with brain damage, therefore we use Rivermead Behaviour Memory Test, Mini Mental State Examination, The Middlesex Elderly Assessment of Mental State, Prevocational assessment according to Jacobs, Canadian model of employment, General office test Functional, Independence Measure etc. The prevocational evaluation result is sending to Labour Offices and should not contain any confidential medical information. This report may contain recommendations for further education or retraining. Physician completes the discharge paper and he summarizes the evaluation of the rehabilitation team members. This report includes positive employment recommendations and work restrictions.

Keywords: Prevocational rehabilitation, disability, functional assessment, abilities to work

Introduction

The definition of a disability according to the International Classification of Functioning, Disability and Health is: a disability is a decrement in the functioning of the body on an individual or social level that arises when an individual with a health condition encounters barriers in the environment. This definition is the result of a consensus of a general discussion in Prague in the framework of the 6th programme of the European Union; Measuring Health and Disability in Europe; supporting policy development (MHADIE) and this was published in the Lancet journal in 2006 [6].

According to the WHO, disability is the “loss or abnormality of body structure or a physiological and psychological function”. Disease, injury or an inborn defect can lead to activity restriction, and can cause also the restriction of participation. Participation is the performance of people with a disability and is closely connected to environmental factors, facilitating or creating a barrier. When facilitating factors are applied, performance is improved and also quality of life is maximally improved. The estimate of people with a disability in the European Union (EU) is different – from 8 to 14%. It means that in a person’s productive age in the EU; approximately 26 million people have a disability. In April 2014, the Czech Statistics Office first published the number of people with a disability in the Czech Republic. The figure is 1,077,673 persons with a disability, 10.2% from the whole population in the Czech Republic [3, 5].

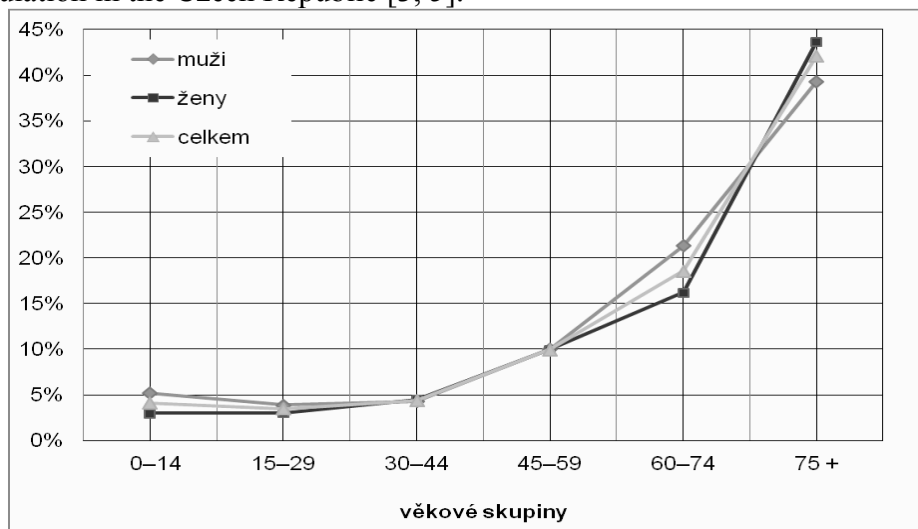


Figure 1: The number of people with a disability in the Czech Republic (Czech Statistics Office, April 2014)

Based on the initiative and methodological guidance of the Department of Rehabilitation Medicine of The First Medical Faculty, Charles University, and in cooperation with the educational company Edost Chomutov, a project was established which was funded by the European Social Fund and from the state budget of the Czech Republic entitled “Initiative of the EQUAL Association – Rehabilitation – Activity – Work (RAW)”. This project was conducted from 2005 until 2008. A total of six inpatient rehabilitation departments in 6 regions participated in this project in cooperation with Labour offices. In the Czech Republic, vocational rehabilitation is under the responsibility of the labour offices in accordance with the Employment Act [4]. As part of this project, personnel, material and supply standards of rehabilitation departments have been developed for prevocational rehabilitation. We have divided prevocational rehabilitation into the first and second tier methodologies.

The EQUAL project was continued by a Systemic Individual Project of Regional Networks cooperating in vocational rehabilitation (PREGNET). A tender was announced by the Ministry of Labour and Social Affairs (MLSA), virtually as a continuation of the RAW project provided that this project will be spread around national regions that were not involved in the RAW project, with the objective to create prevocational rehabilitation facilities in each region (the Czech Republic has 13 regions) with standards of methodology, personnel, material and the supply of equipment. The PREGNET project started in 2012 and ended in 2014. At the end of the project, we proposed that the MLSA issue accreditations for facilities that will perform prevocational rehabilitation, based on the standardization of prevocational rehabilitation procedures, and that prevocational rehabilitation should be reimbursed from the resources in the employment area.

I.

The priority of the PREGNET project was to create new prevocational centres in the rest of the seven regions in the Czech Republic (other regions participated in RAW). Methodology created in RAW was innovative. The goal of the PREGNET project was the methodological standardization of vocational and prevocational rehabilitation, creating a network of all bodies cooperating in the prevocational and vocational rehabilitation of people with a disability in the Czech Republic, and using the International Classification of Functioning, Disability and Health WHO [12].

Centres with accreditation can evaluate the potential to work, education and re-training [2, 8]. The project solved methodology, a part of the complex rehabilitation process. A prevocational rehabilitation process must begin in an acute process in the health care system and also in emergency units. Rehabilitation is necessary for patients with motor,

internal, oncological, visual, auditory, mental and psychological impairment. Patients with a long-term or permanent impact of injury, disease or inborn defect also need other means of rehabilitation (medical, social, educational prevocational and vocational), according to individual needs of the people with a disability [10].



Figure 2: Prevocational Rehabilitation Centres in the Czech Republic

In the prevocational rehabilitation process, the members of an inter-professional rehabilitation team – physicians, physiotherapists, occupational therapists, psychologists, speech therapists, special teachers, nutritive therapists, nurses, social workers, also prosthetics and biomedical engineers must participate, and it is necessary to cooperate closely with family members and patients’ friends.

In patients with a disability, it is necessary to provide continuity of all rehabilitation means – accessibility and the complexity of rehabilitation are crucial, and rehabilitation must start early. The short-term and long-term rehabilitation plans help reach an optimal effect in a short time and is maximally cost effective. In the rehabilitation process, it is important that an individual functional assessment of the psycho-sensory motor potential of people with a disability is the result of an individual inter-professional evaluation. It is important for rehabilitation team members to cooperate closely with family members and also to motivate patients with a disability [6]. The basis for successful integration of the patients/clients with a disability into society is to find a new sense of life, to use their abilities, to find new activities for the early return to work. Methodology uses the term patient/client. A patient is a person who is examined and cured, and is a “part” of the healthcare system. A client is a person who lives his/her life at

own home or in a residential home, e.g. a client of the Labour Office, to use social benefits, is a “part” of the social care system, it is their participation in society.

The initial medical examination contains information about vocational and school case history, and is a complete objective examination. A detailed case history is focused on the objective testing of the psycho-sensory motor potential of the patients for possible working positions. Physicians in a prevocational centre have to study all the health documentation and their own initial examination, and after that, indicate special examinations by other inter-professional team members. During a rehabilitation conference, the rehabilitation healthcare team members evaluate the psycho-sensory motor potential for employment, for education of the patients with a severe disability [7].

Methodologies of Prevocational Rehabilitation

As part of the PREGNET project, standard methodologies for determining the psycho-sensory motor working potential were divided into **basic, recommended and special**.

The basic methodology has been selected so that the prevocational rehabilitation centres in the Czech Republic are uniformly equipped, and that these methodologies require a one-time investment (financed from the project). Methodologies were selected so that they are sufficiently broad and cover most of the work activities. They included tests to evaluate physical exercise, balance, dexterity, orientation in unfamiliar situations, cognitive functions, working position and working equipment. The basic methodologies are: simple; short; time saving (up to 3 hours in a single day); financially and personally less demanding, and suitable for clients with a mild and/or moderate disability. The functional basic methodologies include the Barthel Index; the instrumental routine daily activities test; a daily structure; an interest questionnaire; a self-assessment of pain; a sensory examination, and Work Curve by Emil Kraepelin and Richard Pauli; the Jebsen-Taylor test, the Purdue-Pegboard test (model 320 20); the Jamar Dynamometer, the Loewenstein Occupational Therapy Cognitive Assessment; the Activity Matching Ability System, WHODAS II (World Health Organization Disability Assessment Schedule) and the Isernhagen Work System. The innovative approach in the area of functional assessment is provided by the Isernhagen Work System, a functional diagnostics system intended to test the working and functional potential of individuals which was purchased within the project. This functional diagnostics is intended for people with a disability, without education or with primary education who are capable of performing physical work.

The prevocational rehabilitation centres need not own the recommended methodologies, but if necessary, they should ensure their availability [1, 2, 7].

The recommended methodologies include examinations by experts that each facility is obliged to ensure, if necessary and for example, a targeted and comprehensive assessment; spiroergometry; a speech examination; a psychiatric examination; a hearing examination, sight examination, etc.

The methodologies used to evaluate the functional psycho-sensory motor potential will be complemented based on the professional specialization of the facilities, and according to the rehabilitation goals, including retraining or further education and individual possibilities for professional inclusion of the patient/client [1, 11].

The special methodology is among the optional equipment of the prevocational rehabilitation centres according to their specialization. They are used only by selected facilities based on their experience and focus on the age groups of patients with a disability or for various functional diagnoses. These methodologies are more variable, more detailed, more time consuming and intended for more complex cases in patients/clients with severe and very severe disabilities. Of special methodologies, we use for example, the Functional Independence Measure; the Rivermead Behaviour Memory Test; the prevocational assessment according to Jacobs; a Canadian model of employment and general office test [2, 8].

Conclusion:

Physicians who engage in prevocational rehabilitation initial/baseline medical examinations may prescribe additional functional tests by an inter-professional rehabilitation team. After having finished all the examinations, we discuss each patient/client in a rehabilitation conference. The final report – a summary and assessment – is prepared according to the results obtained by each expert in the team, positive and negative recommendations for healthcare professionals, for labour offices, for social services and support for education.

We send the final report on prevocational rehabilitation to the general practitioner. The final report is also sent to the employment offices and as a standard, is drawn in accordance with the PREGNET project (based on the final report prepared for the employment agencies in the RAW Project). This report should not contain any confidential information. It may also contain recommendations for further education or re-training of the patient/client, as re-training falls within the jurisdiction of the employment office [6].

The employment offices follow the conclusions of the prevocational rehabilitation, and recommended vocational rehabilitation that is focused on

particular work activities and particular job positions. If the prevocational rehabilitation facility recommends further long-term education, a special education teacher will contact the appropriate school.

The final report is sent to the selected school to the attention of the teacher who is responsible for teaching people with special needs. The final report also recommends, on an individual basis, the necessary and appropriate long-term social support (allowances) and services that are processed by the social worker based of functional diagnostics provided by the inter-professional rehabilitation team. The final reports are processed by a physician who will summarize the assessments of experts from the inter-professional rehabilitation team, and should include positive recommendations and recommended work restrictions [3, 4].

Job opportunities for people with a disability:

1. Open labour market:

- a) the first goal is, if possible, to rejoin the previous job
- b) the same employer but a different job position
- c) another employer

2. **Supported employment** – time limited service (only for 2 years) for people with a disability who find a paid job in a common working environment – this means a job in the open labour market. Patients/clients with limited abilities to work need individual, long-term continuous support before and after returning to work.

3. **Sheltered workshop** is an individual job position established by an employer for client with a disability by written consensus with the Labour Office. The Labour Office can provide an allowance for the establishment of a sheltered workshop to employers. Persons with a disability who want to work as self-employed can make an agreement with Labour Office about the establishment of a sheltered workshop and begin to use the allowance for the administration and organization of this sheltered workshop.

The part of supported employment: **A Job assistant** is a person who helps clients directly in their new job to find the optimal kind of communication; discover new abilities and habits necessary for the job. **A Job consultant** is a person who gives the clients support and help to find working positions, to cooperate with employers who want to engage people with a disability [1, 2, 8].

Important Proposals of the Change in the Employment System of People with Disabilities in the Czech Republic

- The necessity of an approved law about coordinating rehabilitation in the health care system, the social care system with an educational system and the system of employment. People with a disability have to start work as

soon as possible with all possible technical aids, with long-term social supports, social benefits and social services in a working environment without barriers.

- The duty of employees in labour offices to inform applicants about the possibility to participate in prevocational and vocational rehabilitation.
- The possibility for the applicants with severe and very severe disabilities to work at home or to use e-work.
- Cooperation with a non-profit organization (non-governmental organization (NGO), is an example of “good practice” e.g. massage courses for the Czech Blind Union organized with Labour Offices in the Czech Republic.
- The necessity to create a new non-medical health profession, an “advisor for employment for people with a disability”. This type of education does not exist in the Czech Republic. Graduates of this study branch would be able to work with people who suffer a disability, have knowledge of functional abilities of these people and an integrated system of typical positions. It is the Czech acronym for Integrated System of Typical Positions, a set of information about the world of labour and methods of using the information to facilitate communication on the labour market and make it more effective.
- It is designed to help people with a finding an optimum employment by means of:
 - maintaining up-to-date databases of occupations and typical positions
 - describing the aspects and requirements of different jobs in a Registry of Typical Positions
 - offering tools for vocational counselling and career guidance, as well as
 - job mediation (placement) instruments
 - referring to other labour market, education and training information systems
 - matching vocational training with the requirements of the labour market
 - offering background material for companies to make their practice of human resource management more effective
 - presenting recommendations for personal growth of individuals and improvement of their skills.
- They could consult individually with employers of the possibility how to use technical aids in work situations and to create a working environment without barriers and with the opportunity of transport from work to home.

We have to prepare education of children, youth and adults with disabilities to reach the highest level of education. Cooperation between education and actual regional need of employees' positions for people with a disability is necessary.

References:

Andelic N, et al. Does an early onset and continuous chain of rehabilitation improve the long-term functional outcome of patients with severe traumatic brain injury? *Journal of Neurotrauma*. 2012; 29: 66-74.

Cameron J. et al. Supporting workers with mental health problems to retain employment: Users' experiences of a UK job retention project. *Work-A Journal of Prevention Assessment & Rehabilitation*. 2012; 42: 461-471.

Decree No. 39/2005 Coll. laying down the minimum requirements for study programmes to obtain proficiency for the performance of non-medical healthcare professions. In: *Collection of Laws of the Czech Republic*. 11 January 2005.

Dispa D, Lejeune T, Thonnard JL. The effect of repetitive rhythmic precision grip task-oriented rehabilitation in chronic stroke patients: a pilot study. *International Journal of Rehabilitation Research*. 2013; 36: 81-87.

Eldar R, et al. Rehabilitation medicine in countries of Central /Eastern Europe. *Disability and Rehabilitation*. 2008; 30: 134-141.

Goljar N, et al. Measuring patterns of disability using the International Classification of Functioning, Disability and Health in the post-acute stroke rehabilitation setting. *Journal of Rehabilitation Medicine*. 2011; 43: 590-601.

Cho KH, Lee WH. Effects of inpatients rehabilitation on functional recovery of stroke patients: a comparison of chronic stroke patients with and without cognitive impairment. *Journal of Physical Therapy Science*. 2012; 24: 245-248.

Laxe S, et al., ICF use to identify common problems on a TBI neuro-rehabilitation unit in Spain. *Neuro-Rehabilitation*. 2011; 29: 99-110.

Leonardi M, et al. on behalf of MHADIE Consortium Definition of disability: what is in a name? *The Lancet*. 2006; 368:1219-1221.

Svestkova O, et al. Functioning and disability in traumatic brain injury. *Disability and Rehabilitation*. 2010; 32: 68-77.

Svestkova O, Sladkova P, Svecena K. Mezinárodní klasifikace funkčních schopností, disability a zdraví, WHO (MKF), International Classification of Functioning, Disability and Health, WHO (ICF), Prague: Charles University in Prague, 1st Faculty of Medicine. 2010; 44.

WHO. International classification of functioning, disability and health: ICF. Geneva: World Health Organization, 2001; 299.