

ICF AND CLIENT EVALUATION IN NEUROLOGICAL PHYSIOTHERAPY

EVALUAREA PACIENTULUI ȘI ICF ÎN RECUPERAREA NEUROLOGICĂ

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Abstract: Introduction of ICF guides the evaluation of the clients. We have to choose the appropriate tests for evaluation at the level of impairments, activity and participation. The aim of this lecture to introduce the relationship between Bobath Concept and ICF through a

Rezumat: Ghidurile ICF în evaluarea pacienților. Trebuie să alegem testele potrivite pentru evaluarea nivelului dizabilității, pentru activitate și implicare. Scopul acestei lucrări este de a sublinia relația dintre conceptul Bobath și ICF prin intermediul unui studiu de caz.

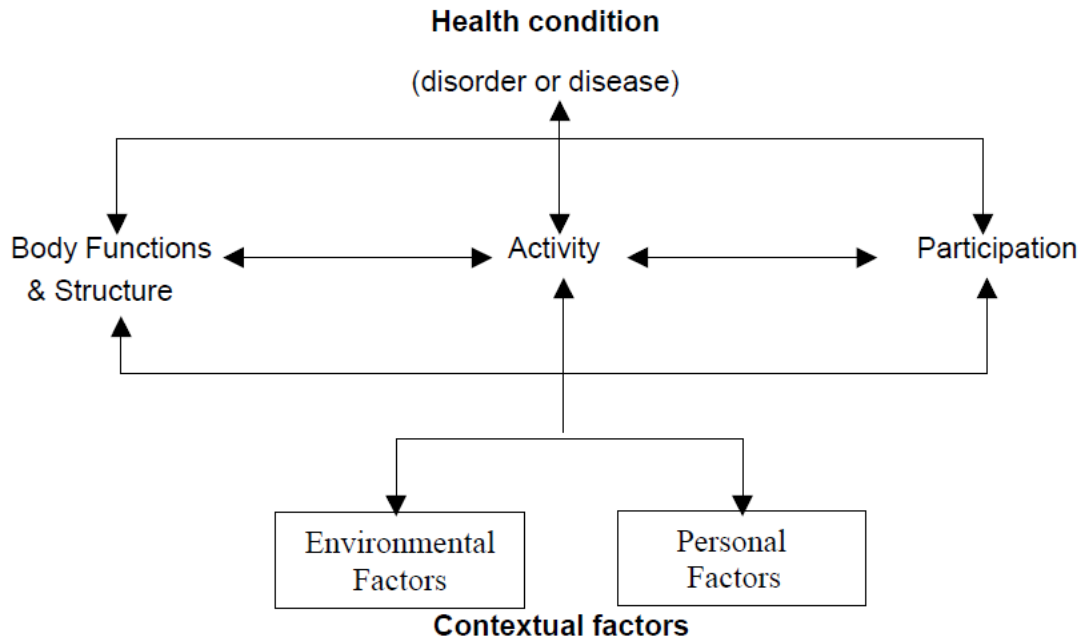
Introduction

International Classification of Functioning, Disability and Health (ICF) has been developed by the World Health Organisation (WHO).

The aims of the ICF are: to provide a scientific basis for the consequences of health conditions; to establish a common language to improve communications; to permit comparisons of data across countries, health care disciplines, services and time; to provide a systematic coding scheme for health information system. The ICF is a tool for classifying different aspects and factors which influence a person's life and describe how people live with their health condition.

The ICF domains contain the Body function and structures, the Activities and Participation and it is related to personal and environmental factors.

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The body function and structures domain is very specific recording of detailed functional abilities and impairments.

Activities and participation describes **individual's** functioning as a whole person, as opposed to function and structure of his/her body parts. What is most important is that there are a range of activities going from basic to complex that describe a person's ability to live independently and be integrated into their communities.

In this meaning **activity** is the execution of a task or action by an individual, while **participation** is involvement in a life situation. We have to mention **activity limitations** which are difficulties an individual may have in executing activities. **Participation restrictions** are problems an individual may experience in involvement in life situations.

Environmental Factors make up the physical, social and attitudinal environment in which people live and conduct their lives.

ICF may be used to ensure that all aspects of a person's situation have been evaluated as a basis for his rehabilitation process.

Within rehabilitation, the assessment and understanding of participation and understanding their major determinants is essential not only to understanding the broad health-related impacts of chronic illness or conditions, but to evaluate the effectiveness of rehabilitation intervention.

Assessment

The aim of physiotherapy assessment is to understand the client situation including his personality, life situation and condition, family relations, work situation and his resources as well as the analysis of his functional movements. The assessment should be therefore resource and problem orientated. The aim of the treatment is to improve the client's functional level to his full potential therefore

evaluation of patient's potential is essential. The assessment helps to make hypotheses what can be the reason for the problem.

During assessment, the therapist collects information and starts a process of clinical reasoning to form hypotheses about the client's main problem regarding to activity and function – why the client moves as he does. After taking the history the therapist evaluates the functional activity. It contains interview, observation, analysis and handling, if necessary aids. The aim is to determine the client abilities, the degree of his independence. Evaluating the functional abilities provides information about the quantity (what he is able to do) and quality (how he is performing the movements, activities) and why he is using that way (clinical reasoning).

Through observation the therapist can have information about the client's security, effort, movements' efficiency, movement patterns, balance, compensation, associated reactions, perception, cognition, interaction with environment and so on. (B Gjelsvik, 2008)

Clinical reasoning requires an ability to analyze the interaction between the various ICF dimensions. The therapist needs to understand the client's needs and expectation, to gain an impression of the client's resources and limitation in all three dimensions, formulate hypotheses about the most important factors, to choose goals together with the client, to choose treatment interventions, to evaluate treatment intervention and to re-evaluate the client's activity/function.

Outcome measures

It is an important question how to select outcome measurement. We need to consider the client's potential outcome level, the goal and outcome measures for the different domains of the ICF. WHAT? WHY? HOW? For answering these questions we have to also consider the determining factors which will influence our selection.

These factors are the internal needs (to verify the way of treatment), external pressure (insurance company, institution) and purpose of the measurement, suitability, availability, usefulness of the test, reliability, sensitivity and validity, and so on. Most rehabilitation centers and hospitals have had already preferable tests in their working context.

Evaluating the client at the level of **Body Function and Structures** we can use several tests. Here you can see only few examples.

Ashworth scale (Bohannon and Smith, 1987) can be used for measuring the muscle tone. There are common test used by the therapist for evaluating muscle power, muscle length, sensation, range of motion. The Trunk Impairment Scale for example (Verheyden et al. 2004) evaluates the trunk stability and movement in sitting.

At the **Activity** level we can evaluate mobility in the bed, gait, reaching, standing up, sitting down, balance, running, driving. The tests we can mention here can be the 10 m walking test, the Dynamic Gait Index (Shumway-Cook et al., 1997), Timed Up and Go ([Podsiadlo D](#), [Richardson S](#), 1991), Step test (Hill et al., 1996), GAS (Kiresuk et al., 1994), Berg Balance Scale (Berg et al., 1992), Functional Reach (Duncan et al., 1990) and many others.

At **Participation** level we evaluate the quality of life. For this purpose we can use SF-36 health survey, IQOLA (Aaronson, 1992), GAS (Goal Attainment Scale).

For getting a good, complex picture about our client we need to take several tests at different domains and it usually cannot be done in one session.

In our profession the most difficult part is to find the balance between the art and science not only in our therapy but also in our evaluation to judge our hypotheses and intervention. We need numbers to prove the effectiveness of our treatment. Therefore we have to use our creativity as well as our scientific, professional knowledge for getting the best possible result in our clients.

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