

Development of innovative training solutions in the field of functional evaluation aimed at updating of the curricula of health sciences schools



MODULE: FUNCTIONAL EVALUATION: CONCEPT AND METHODOLOGY

Didactic Unit B: Importance of functional assessment and its applications




This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0. It is allowed to download this work and share it with others, but you must give credit, and you can't change it in any way or use it commercially.



Diagnosis

Diagnosis of social sciences is the recognition on the basis of collected and evaluated data from various sources of a particular state and its origin or causes. This explains the significance for the development stage, as well as the assessment of the possibility of changing it in the desired direction.

5 stages of diagnosis :

- 
- A small, light blue speaker icon with three curved lines representing sound waves, positioned to the right of the first list item.
- 1. classification and classifying diagnosis - it answers the question what reasons originally worked**
 - 2. genetic diagnosis - it answers the question what sequence of events has led to the current state**
 - 3. the diagnosis of meaning answers the question about the significance of its current state for its entire functioning**
 - 4. phase diagnosis - answers the question in what phase of development is this state**
 - 5. developmental diagnosis (prognostic) - answers the question in what this state will develop in the future**

In every case of diagnosis, all aspects of the diagnosis do not occur, and in each case all elements are equally important. However, two stages should always occur: a classification diagnosis (it is necessary to classify a given state of affairs) and a genetic diagnosis (explanation of the conditions of the existing state of affairs).

Assignment diagnosis

Diagnosis assigning to a species or type: classifying classification - the most developed in the natural sciences (e.g. botany, zoology, medicine) due to the need to find in the studied subjects, species of specifically significant and at the same time basic qualities that allow to distinguish a given species from another.



Typological assignment - finds application in social, humanistic and partly natural sciences (e.g. psychology, sociology, literature, pedagogy, medicine, archeology). This type of diagnosis is characterized by high descriptive and explanatory values, there are no such rigid barriers as classification diagnosis. (To what known type should the state of affairs be examined?)

Genetic diagnosis

Genetic diagnosis (causative) allows to explain the development of a given process or the state of the object under investigation. This diagnosis reveals the developmental sequence that led to the current state. Genetic diagnosis is necessary for proper treatment.

/ What are the reasons for the current status quo? /



Teleological diagnosis (meaning))

The teleological diagnosis (meaning) explains what changes in the functioning of the whole system are caused by a given process, or the state of affairs and how the whole affects it.

What is the significance of a single component of the tested state of affairs for the whole of the condition being tested?



Phase diagnosis

Phase diagnosis finds application in dynamically developing processes, organisms, psychics, human communities, diseases where the phase determination allows to determine the degree of development of the studied processes and is the basis for predicting their further development.

In what phase is the tested state of affairs?



Developmental diagnosis (prognostic)

The developmental (prognostic) diagnosis is the anticipation of further development of the examined process or state of affairs. It is based on previous stages - parts of the diagnosis and is their direct result. On the basis of past stages, the development of future stages is requested.

How will the tested state of affairs develop further?

In summary, the various types of the above-mentioned diagnoses are interdependent and, as a result, lead to a multilateral diagnosis of the studied phenomenon, a detailed description, explanation of its operating conditions and development trends.



Introduction to functional assessment

Assessment - functional diagnosis always concerns people with various disabilities or with special developmental, health or educational needs

In any case, in this context it is necessary to plan some kind of supportive, advisory and therapeutic intervention



Introduction - We can talk about Functional assessment (FA) for example:

FA in physiotherapy

FA in autism spectrum disorders

FA in psychotherapy

Others



Assessment of function

In many fields, for example, medicine, physiotherapy, we can meet the term diagnosis of a function that most often concerns the assessment of the functioning of a specific human body and can be part of the diagnosis in functional assessment

There are many different types of tools diagnosing the level of human functioning

It should be remembered that diagnosis is a process that can consist of many different elements and which ends with a generalization, an assessment that in turn is the basis of the support program.

Indications WHO - International Classification of Function, bio psychosocial model (ICF)

It is not the condition of the subject itself that implies his disability;

An important element of the subject's resources regulating the degree of disability are, apart from the health condition, personal factors, such as eg cognitive resources, values, interests, ways of spending free time, emotional and social competences, etc.;

Disability is a phenomenon that "happens" in the space of social relations, built by the entity itself and its resources and other entities, also possessing its own resources;

Disability is not a chronic condition - its dynamics and intensity depends both on the health condition of the subject, the current condition of its resources, as well as the possibilities and barriers created by the given environment (which also changes itself and can also be changed by the subject itself).



ICF classification - goals

Creating scientific basis for understanding and researching health issues and related states, results and determinants;

Establishing a common language used to describe health and health-related conditions, due to the need to improve communication between different users, e.g. health professionals, academics, policy makers and the general public, including disabled people;

Enabling comparison of data from different countries, from many areas of healthcare, services and time periods;

Creation of a structured coding scheme for IT systems in the field of health

(vide ICF, 2009).



Learning

It is worth paying attention to the term "learning", which usually means:

Learning is the acquisition of new knowledge or skills through teaching, experience or study. It is a transformative process in which the understanding of new information can lead to changes in a person's behavior or perception of the world around them. (vide.

<http://thelearningcoach.com/learning/10-definitions-learning/> accessed on 17.01.2020)

The most important thing is always that it is a process of changes in thinking, behavior on the way to determining your place in the world;

There are many examples of the importance of learning for quality of life and happiness and fulfillment;



Some examples

Nick Vuicic

<https://www.youtube.com/watch?v=6P2nPI6CTIc>

<https://www.youtube.com/watch?v=QSuDHFQ9wkZE>

Stella Young -

https://www.ted.com/talks/stella_young_i_m_not_your_inspiration_thank_you_very_much/up-next

Deep sea diving -

https://www.ted.com/talks/sue_austin_deep_sea_diving_in_a_wheel_chair/up-next

Ashoka changemakers schools -

<https://www.youtube.com/watch?v=w7IQE8apk2o>



(accessed on 18.07.2019)

Functional diagnosis in educational and therapeutic work

The diagnosis of functional skills serves to build a program of individual work with the patient, its effective course is based on including in the diagnostic operation the following principles:

Positive approach (recognition of strengths of the patient); complexity (multidimensionality); development (including dynamics of development);

Forecasting;

Profiling (construction of a development profile showing the results of the collected diagnostic material);

Non-invasive (conducting the procedure in natural conditions);

The action should be focused on the rehabilitation process;
(vide. Głodkowska J., 1999)



The specificity of functional assessment

step 1. Preparing ecological diagnosis in consultation with other specialists (the so-called "environmental inventory");

step 2. Assessment of the child's functioning in the perception of parents, the immediate environment of the patient;

step 3. Assessment of current skills and fitness of the specialists (observation of various forms patient's activity and interaction with the environment);

step 4. Defining the scope and type of assistance;

Step 5. Analysis of the information gathered by the team, determination of the methods of implementation and implementation of the assistance program;

(vide Serafin T., 2005)



Definitions of functional diagnosis and assessment

Functional assessment is a continuous collaborative process that combines observing, asking meaningful questions, listening to family stories, and analyzing individual child skills and behaviors within naturally occurring everyday routines and activities across multiple situations and settings.

(Vide. <http://www.infantva.org/documents/Definition%20of%20Functional%20Assessment.pdf> – Accessed on 17.01.2020)



Another contexts

Six steps –

https://education.byu.edu/familyhope/six_steps

Ten steps

<https://researchautism.org/10-steps-to-understanding-and-writing-a-functional-behavior-assessment/>

Functional Assessment vs. Comprehensive Evaluation -

<https://www.understood.org/en/school-learning/evaluations/evaluation-basics/functional-assessment-what-it-is-and-how-it-works>

Physical therapy diagnosis: How is it different?

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5957314/>



(accessed on 18.01.2020)



Video examples

Functional Behavioral Assessment

<https://www.youtube.com/watch?v=Qaz5kcS2oD4>

Practical Functional Assessment

<https://www.youtube.com/watch?v=NBW8ooEulys>

(accessed on 18.01.2020)



Five steps of functional assessment –based interventions

Introduction – <https://youtu.be/6DpmT0gX7cY>

Step 1 - <https://www.youtube.com/watch?v=efJMXcxdT9c>

Step 2 - <https://www.youtube.com/watch?v=nWIN0IZYdJ4&t=26s>

Step 3 - <https://www.youtube.com/watch?v=LUbnyuEieog&t=44s>

Step 4 - <https://www.youtube.com/watch?v=BM7QCgv4hWU>

Step 5 - <https://www.youtube.com/watch?v=JZdL87sagco>

(accessed on 18.01.2020)



Diagnosis in the medical and bio psychosocial model - examples

Aspect of analysis	Medical model	Biopsychosocial model
The purpose of the diagnosis	Identification of deficit, irregularities, disease	Identification of difficulties and barriers in developing the potential of the subject; diagnosis of obstacles to self-realization
The scope of the diagnosis	Patient	The patient and his environment
Diagnosis methods	Quantitative, statistical	Quantitative and qualitative, the source of inference is primarily the observation of changes in the individual development of the subject; reference of the patient's result to his previous tests,



ICF classification and ICD-10 classification

The ICF classification should not be considered as a substitute for the ICD-10 classification. Both were developed by the World Health Organization to provide tools for a comprehensive description of health and / or disease status, and in practice should be used together;

The ICD-10 approach relates to the etiology of the phenomenon and its structure, which allows to name a specific type of disorder, and the ICF approach refers to functions that both a positive (action) and negative (of the action limit) fulfill a specific disorder;



ICF classification - Goals

Creating scientific basis for understanding and researching health issues and related states, results and determinants;

Establishing a common language used to describe health and health-related conditions, due to the need to improve communication between different users, e.g. health professionals, academics, policy makers and the general public, including disabled people;



ICF classification – Goals (continuing)

- Enabling comparison of data from different countries, from many areas of healthcare, services and time periods;
- Creation of a structured coding scheme for IT systems in the field of health

(vide ICF, 2009).



ICF classification - components

I part.

Functioning and disability

- body functions and structures
- activity and participation



ICF classification – components (continuing)

II Part. Contextual factors

- environmental factors
- personal factors



The importance of components part 1

- The functions of the human body are the physiological processes of individual body systems, including also mental processes; the structure of the human body is its anatomical parts: organs, limbs and their components;
- An activity is a person performing a task or undertaking an activity; participation is the involvement of a given person in specific life situations.



The importance of components part 1 (continuing)

Activity and participation are described by two qualifiers: performance and ability. - This distinction is crucial because it indicates the area of the subject's potentiality;

Ability is the ability of a person to perform a task or take action, indicates the highest possible degree of functioning of a given person in a specific area) and what is currently manifest in behavior;

Execution, i.e. what a given person does in his current environment;

The discrepancy between ability and performance allows to determine the direction of modification of the environment in which the tested person currently operates;



The importance of components part 2

Environmental factors create a physical and social environment and a system of attitudes in which people live;

Personal factors refer directly to the subject, include such features as: age, sex, social status, life experiences;

Currently, the ICF classification does not include these factors, but users can themselves include them in the ICF assessment.



ICF classification - constructions

There are four designs for the first part of the classification:

- change in body function
- change in body structure
- ability
- execution

The construction for the second part of the classification is:

- facilities or barriers related to environmental factors.



ICF classification – constructions (continuing)

Individual constructions for a given component can be evaluated according to the scale:

0 - no problem (no, absent, irrelevant)

1 - slight problem (small, small)

2 - moderate problem (medium, disputes)

3 - a significant problem (big, strong)

4 - extremely big problem (complete)



It is also possible to construct various types of scales adapted to the needs of a given diagnostic and therapeutic environment

(Developed on the basis of Knopik T. Functional diagnosis Planning psychological and pedagogical help Postdiagnostic activities, Warsaw 2018)

ICF classification - summary

The ICF classification does not only apply to people with disabilities. With its help, you can describe all aspects of health and conditions related to the health of every human being. This universal use of classification allows us to see that some people with disabilities function in many areas better than those considered to be fully functional.



Principles of creating functional assessment tools

In various areas of support, therapy and counseling for people with special needs, standardized diagnostic tools, tests, scales as well as tools for evaluating test results using devices are used.

You can also find many proposals on the Internet, such as: <https://www.cmhcm.org/userfiles/filemanager/961/> (Accessed on 17.01.2020)

It is also important to be able to create your own assessment tools adapted to the scale of phenomena and the needs of patients in the form of, for example, observation sheets, interview questionnaires, etc.

On the next slide there are links to websites that can be helpful in understanding the rules for creating such tools



Principles of creating functional assessment tools

What Is a Functional Behavior Assessment?

https://www.gvsu.edu/cms4/asset/64CB422A-ED08-43F0-F795CA9DE364B6BE/sp0009-_functional_assessment.pdf

The Methodology of Functional Assessment

https://milnepublishing.geneseo.edu/instruction-in-functional-assessment/chapter/chapter-2the_methodology_of_functional_assessment/

Accessed 17.01.2020



Principles of creating functional assessment tools – video examples

ePortfolio - most often used in education but also possible to be used eg in patients with chronic diseases or in counseling

https://www.youtube.com/watch?v=kTCISU_md10

Assessment Tools and Patient Placement Criteria

<https://www.youtube.com/watch?v=clusfLd7Mlo>

Accessed on 17.01.2020



Summary

The presentation obviously does not cover the subject of functional assessment in the organization of therapeutic processes.

The main goal here is to create a conviction that in many specific cases of different patients, such elements as eg:

Good social contacts

Subjective sense of happiness and joy of life

Ability to learn

These are important determinants of health



Control questions

1. Discuss the relationship between the diagnosis processes and the functional assessment process
2. Discuss the differences in the organization of functional assessment processes in the medical model and the biopsychosocial model
3. Discuss the differences between ICD and ICF
4. Discuss the importance of learning in the organization of therapeutic processes
5. Discuss the principles of creating functional assessment tools



Thank you for your attention





The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

