#### MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

## NATIONAL UNIVERSITY OF UKRAINE ON PHYSICAL EDUCATION AND SPORT

Department of Physical Therapy and Occupational Therapy

## FEATURES OF FORMATION OF GENERAL AND PROFESSIONAL COMPETENCIES IN EDUCATION OF PHYSICAL THERAPISTS IN THE EUROPEAN UNION

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#### **CHAPTER 1**

# ANALYSIS OF FORMATION OF GENERAL AND PROFESSIONAL COMPETENCIES IN EDUCATION OF PHYSICAL THERAPISTS IN THE NORTHERN AND WESTERN EUROPE COUNTRIES

According to the European Classification of Skills/Competences, Qualifications and Occupations (ESCO), the International Standard Classification of Occupations (ISCO) physical therapy specialists are included in the category of health professionals.

Physical therapy is now a special educational program, taught in many non-medical faculties in almost all of Europe.

Further we consider some aspects of approaches to the training of physical therapists in the countries of the European Union.

#### 1.1. Denmark

The competencies at the **bachelor's level** are regulated by the Order on the Education of a Professional Bachelor in Physiotherapy.

The objectives of the learning outcomes include the knowledge, skills and competencies that a professional bachelor of physiotherapy should achieve in the program.

#### Knowledge:

- 1. can understand and reflect the structure and functions of the body in a biopsychosocial perspective;
- 2. may affect to physiotherapeutic examination, treatment and health promotion based on physiotherapeutic theory and method in physical activity, motor and manual methods;
- 3. to have knowledge about the side effects of drugs that cause contraindications or special measures for the use of physiotherapy examinations and therapy;

- 4. to have knowledge of the basic concepts and relations with the work on health care from the biopsychosocial point of view and the structure of health care systems;
- 5. could understand and reflect health policies and economic structures for health in a national, international and global perspective;
- 6. have the knowledge and ability to reflect the use of the ICT profession and the importance of technology;
- 7. to have knowledge, to understand and reflect the goals of the citizen and the patient, as well as to engage in interdisciplinary and intersectoral cooperation on this issue;
- 8. to have knowledge and be able to reflect the legal basis and ethics of selfemployment and to reflect and act professionally in this regard;
- 9. to have knowledge and be able to understand innovation as a method of change of practice, as well as with simple methods of implementation in relation to health promotion, prevention and treatment;
- 10.to have knowledge and be able to reflect the use of theories and methods of communication and can understand the communicative importance of dialogue and relationships;
- 11.to have knowledge of methods and standards of quality assurance, patient safety and quality development, and be able to reflect their use;
- 12.to have knowledge about own professional practice, as well as own professional tasks and areas of responsibility in organizational, administrative and social aspects;
- 13.to have knowledge of priority professional academic efforts in the relevant framework conditions in the field of healthcare:
- 14.to have knowledge and be able to reflect the theory of science, research method and models for assessment, quality assurance and development, and to relate this knowledge with research and development in professional practice.

Skills:

- to apply theory and methodology in medical education / psychology, analysis
  of movements, functional examination and examination of tissues, and justify
  their use in anatomical structures, physiological and biomechanical conditions,
  as well as knowledge of pathology, neurophysiology, concepts of health and
  disease;
- 2. to apply and evaluate selected clinical measurement methods in connection with diagnosis, classification and prognostic conditions;
- 3. to analyze, evaluate and diagnose movement and functional abilities in collaboration with the citizen / patient and on health and quality of life;
- 4. to evaluate and substantiate methods of physiotherapy examination, analysis, intervention and evaluation in health promotion, prevention, habilitation, rehabilitation, including treatment and rehabilitation;
- 5. to apply and learn methods of assessing physical forms of stress and psychosocial factors in collaboration with the citizen and the patient, including occupational health and ergonomic conditions and their spread;
- 6. to apply testing and screening, as well as diagnostic and prognostic examination and treatment of dysfunctions of the musculoskeletal system and physiologically related systems, pain conditions and psychosomatic problems;
- 7. in collaboration with the citizens, assess the need for the use of assistive technologies and technological solutions in the field of healthcare in order to support and promote the ability of citizens to move and function and participate in society;
- 8. to work independently and professionally, based on the citizen's perspective, with services aimed at citizens and patients who respect the autonomy and dignity of the individual;
- 9. to apply and master situational and professionally relevant communications, guidance, counselling and research of citizen and patient courses in professional practice and in cross-professional practice;
- 10.to develop interdisciplinary and cross-sectoral cooperation in different courses and contexts of citizens and patients;

- 11.to apply professionally relevant information and communication technologies and social technologies that include, as far as possible, the citizens' own resources;
- 12.to apply, evaluate and substantiate methods and described standards for quality assurance and quality development;
- 13.to learn appropriate research and work methods for searching, and interpreting empirical data, theory and research methods, as well as initiate and participate in innovative and research work;
- 14.to master through continuous critical reflection and implementation of new knowledge gained in health research and in the clinical research of the profession.

#### Practice:

- 1. independently manage and take responsibility for the implementation, distribution and management of the examination, diagnosis, treatment and rehabilitation, health promotion, health optimization, as well as prevention and rehabilitation:
- 2. to study independently the professional and scientific knowledge in professional contexts and be able to monitor, apply and participate in research work in interdisciplinary and physiotherapy professional fields in both the public and private sectors;
- 3. to carry out an independent professional assessment in unique and difficult situations and, in collaboration with other healthcare professionals, to help efficiently and safely use of social resources through assessment, documentation and quality assurance;
- 4. independently manage and develop new health-related business areas that support entrepreneurship, as well as the development of healthcare technologies and the development of citizens in the public and private sectors;
- 5. independently engage in situational therapeutic relationships with citizensoriented services – based on current ethical principles, patient safety and

- requirements for keeping records and identifying and managing ethical dilemmas that arise during practice;
- 6. independently identify citizens with nutrition needs and, through interdisciplinary collaboration with nutrition staff, develop comprehensive rehabilitation plans;
- 7. to take independent responsibility for coordination and leadership in health care implementation, intervention, treatment, health promotion, prevention and rehabilitation practices;
- 8. to adapt to new situations and be innovative in decision-making and decision-making separately and in collaboration with citizens and other business partners;
- 9. to develop own knowledge and skills through lifelong learning;
- 10.independently apply and integrate national and international research literature, as well as results, to integrate them into professional practice and development;
- 11.to regulate and independently participate in communication in various contexts, including establishing equal, dialogue-based and value-creating relationships with citizens, patients, relatives, and interprofessional partners;
- 12.to process and independently participate in interdisciplinary and intersectoral cooperation and, based on a holistic perspective, support the citizen and patient as a central and active player in an individual course;
- 13.to process and take responsibility for technological technologies, including information and communication technologies in the appropriate context;
- 14.to process and take responsibility for quality assurance and quality development;
- 15.to demonstrate responsibility and stay up-to-date on understanding and identifying their own learning processes and development needs.

Graduates with a Master's degree programme in Physiotherapy will possess the following final competences within the categories of knowledge and understanding, skills and competencies:

## The Graduate's Knowledge:

- knowledge about health, natural, human and social science methods for critical implementation of new knowledge from scientific articles regarding clinical practice, i.e. evidence-based practice, and to be able to participate in research projects;
- 2. knowledge of quality development tools to be able to independently implement, manage and report on quality development projects;
- 3. knowledge of the methods used to critically develop quality of all aspects of the physiotherapeutic working process based on the latest international research;
- 4. knowledge about the processes surrounding scientific issues in order to formulate scientific issues relevant to the physiotherapy practice.

#### The Graduate's Skills:

- 1. masters scientific methods and tools relevant to the physiotherapy practice;
- 2. can evaluate and select among scientific theories, methods, tools and general skills relevant to the physiotherapy practice, as well as establish new analysis and solution models within physiotherapy;
- 3. can discuss professional and scientific issues with both peers and nonspecialists for quality development of the physiotherapy practice;
- 4. can ensure that their own physiotherapeutic practice and that of their and colleagues is evidence-based and meets national and international clinical guidelines based on the latest international research;
- 5. can disseminate research-based knowledge relevant to physiotherapy.

## The Graduate's Competences:

- 1. can critically evaluate and identify skills development needs and organise and implement skills development courses targeting the quality development/evidence-orientation of clinical practice;
- 2. can critically evaluate current clinical practices and, on that basis, initiate development projects targeting quality development and evidence-based organisation of practice;

- 3. can design and manage work, evaluation and development processes within the physiotherapy practice that are complex, unpredictable and which require new solution models:
- 4. can produce unambiguous, clear and useful reports following an evaluation and/or quality development project and disseminate the project results.

#### 1.2. Norway

The objectives of the learning outcomes are set out in the example of the Arctic University of Norway's educational program.

After graduate the **Bachelor's level**, students will acquire competencies in the following areas:

Health, function and movement:

- 1. interpret (analyze) human-environment interaction and explain how it creates conditions for functional ability and health;
- 2. have deep knowledge of the body, especially the structure of the system of movement, development, adaptation and function;
- 3. to explain different views on health and disease, function and movement.

Examination, mapping, evaluation, treatment and other activities:

- 1. to examine people with disabilities, analyze and treat them with rehabilitation and preventive methods;
- 2. to map environmental factors that may affect human function and health and apply appropriate health promotion and prevention measures;
- 3. to guide and educate patients / users and others.

#### Attitude and Ethics:

- 1. to act in a professionally responsible manner and show respect, care and empathy in interacting with patients / users and others;
- 2. to promote participation and an equal relationship between patient / user and physiotherapist in planning and conducting treatment and other activities.

Subject of development, quality assurance and research:

- to demonstrate the ability to be critical and analytical in assessing academic knowledge;
- 2. to be able to document, maintain quality and evaluate their own business;
- 3. to demonstrate the ability to systematically and reflectively research academic issues, both in their clinical practice, and in supervised research and development work;
- 4. to take into account different scientific theories and paradigms.

#### Organizational competencies:

1. to be able to take into account the development of the health service and physiotherapy, the structure, tasks and basic conditions, as well as the laws, rules and regulations governing the activities of the physiotherapist.

After graduate the **Master's level**, students will acquire competencies in the following areas:

#### Knowledge:

- 1. have a deep understanding of specialized neurological or psychomotor physiotherapy in relation to people with various injuries, diseases and health problems;
- 2. have a deep knowledge of the theory of natural sciences and research methods, as well as ethical aspects related to health research in general and the subject area in particular;
- 3. have deep knowledge of various theoretical ideas about the body and what effects different views can have on the body for clinical practice and knowledge development;
- 4. have deep knowledge of the importance of user engagement, ethical and communication processes in therapeutic contexts that focus on the body and health;
- 5. have a deep understanding of how the Norwegian health and welfare social care system works, and how specialized neurological and psychomotor physiotherapy is integrated into the overall health system.

#### Skills:

- 1. to research, evaluate and treat advanced neurological or psychomotor physiotherapists;
- 2. to apply theoretical and clinical knowledge to implement treatment programs adapted to the needs and resources of users / patients, regardless of age, gender, cultural and ethnic origin;
- 3. to be critical of various sources of knowledge, theories and clinical methods within their own field of study, and may work independently to address clinical problems and theoretical issues;
- 4. to plan, implement and disseminate limited research and development projects in its area in accordance with applicable research ethics laws and regulations.
- 5. to communicate and collaborate with patients and relatives, have experience in interdisciplinary collaboration and coordinate treatment with other relevant subject groups.

#### General competencies:

- 1. to be able to analyze and formulate clinical, theoretical and ethical issues, as well as contribute to professional development and research in physiotherapy and healthcare;
- 2. to be able to analytically and critically relate to academic knowledge from various sources of information and critically reflect the connections between theory, research and professional practice;
- 3. to be able to use specialized clinical expertise faced with complex problems within and outside their field of study;
- 4. to be able to communicate about academic problems, clinical assessments and findings with peers, other professional practitioners, and the general public together to develop good medical services;
- 5. to be able to apply his professional knowledge in teaching, guidance and counselling.

#### 1.3. Finland

The objectives of the learning outcomes are set out in the example of the Laurea University of Applied Sciences programs of education.

After graduate the **Bachelor's level**, students will acquire competencies in the following areas:

#### Ethical competence:

- 1. to be able to follow the principles of equality and justice;
- 2. to be able to apply the principles of professional ethics in the field of his activity;
- 3. to act as a responsible citizen of the world;
- 4. to accept responsibility for own and collective actions;
- 5. to use the principles of client-oriented approach in financial, social and environmental aspects.

#### Social competence:

- 1. to be able to communicate in a working community and intercultural situations;
- 2. to be able to organize communication in a working community;
- 3. to be able to assess the relationship of competent need for multicultural cooperation;
- 4. to be able to evaluate actions and opportunities.

## *Innovative competence:*

- 1. to be able to identify elements that require changes in working life / project;
- 2. to be able to analyze and interpret the innovativeness of the process of applying existing international knowledge;
- 3. to be able to create new working methods using creative finds and solutions of client oriented problems.

## Management competence:

- 1. to be able to lead a development project as a Project Manager;
- 2. to be able to promote a common spirit among those who participate in the development project by personal example.

#### Professional competence:

- 1. to be able to make extensive use professional concepts;
- 2. to be able to compare and select relevant information;
- 3. to be able to report and communicate in a professional manner;
- 4. to be able to work independently and responsibly, using skills and methods that have been learned;
- 5. to be able to take responsibility for interacting with clients and / or cooperation partners and respond to their needs;
- 6. to be able to plan and evaluate work, considering safety and / or ethical considerations;
- 7. to be able to promote teamwork and team spirit;
- 8. to be able to manage own time accordingly, to complete the agreed task at the request of a quality level.

After graduate the **Master's level**, students will acquire competencies in the following areas:

- 1. to be able to organize, study and develop physiotherapy and rehabilitation;
- 2. to be able to interpret and apply information on the effectiveness of physiotherapy methods;
- 3. to be able to speak out on specific issues in the health sciences and physiotherapy, relying on theoretical, research and practical knowledge and critically considering various points of view;
- 4. to be able to act independently in performing national or international expert tasks related to physiotherapy or rehabilitation;
- 5. to be able to determine the needs for research and development related to physiotherapy and health, and to apply scientific methods.

#### 1.4. Sweden

The objectives of the learning outcomes are set out in the example of the Lund University.

After graduate the **Bachelor's level**, students will acquire competencies in the following areas:

#### *Knowledge and Understanding:*

- 1. to be able to demonstrate knowledge of the scientific base of the field and knowledge of current research and development, the connection between science and the proven experience of the importance of relationships in the profession;
- 2. to be able to demonstrate knowledge about living conditions in society that affect the health of individuals and groups;
- 3. to be able to show knowledge of relevant charters;
- 4. to be able to demonstrate knowledge of men's violence against women and violence in close relationships

#### Skills and Abilities:

- 1. to be able to demonstrate the ability to perform physiotherapy activities independently and in collaboration with the individual; the ability to initiate and participate in health promotion, treatment and rehabilitation; work at the individual, group or community level;
- 2. to be able to demonstrate the ability to apply their knowledge to solve various situations, phenomena and problems based on the needs of individuals and groups;
- 3. to be able to demonstrate the ability to inform and educate different groups and perform indicative tasks;
- 4. to be able to demonstrate the ability to provide oral and written reports and discuss stakeholder treatment and outcomes, and to document them in accordance with relevant rules;
- 5. to be able to demonstrate the ability to work together and collaborate with other professions;
- 6. to be able to demonstrate the ability to critically review, evaluate and use relevant information and discuss new facts, phenomena and problems with various groups and thereby contribute to the development of the profession.

## Judgments and Approach:

1. to be able to show self-knowledge and sensitivity;

- 2. to be able to demonstrate the ability, with a holistic view of a person, to evaluate actions based on relevant scientific, social and ethical aspects with particular attention to human rights;
- 3. to be able to demonstrate a professional approach to clients or patients, their relatives and other groups;
- 4. to be able to demonstrate the ability to identify the need for additional knowledge and constantly develop their skills.

After graduate the **Master's level**, students will acquire competencies in the following areas:

#### Knowledge and Understanding:

- 1. to be able to develop a graduation project based on theories of physiotherapy;
- 2. to have knowledge of scientific methods, both quantitative and qualitative;
- 3. on the basis of scientific approach to consider, substantiate and evaluate own and joint student diploma project in physiotherapy.

#### Skills and Abilities:

- 1. to be able to critically examine ongoing research;
- 2. to be able to process, present and interpret the collected data in a logical and structured way;
- 3. to be able to independently apply and explain descriptive and / or analytical statistics and / or qualitative content analysis, in an active and independent logical, structured and constructive way;
- 4. to be able to defend and review a graduation project;

## Judgments and Approach:

1. to be able to identify, apply and discuss fundamental scientific considerations.

#### 1.5. Austria

## $Physiotherapeutic\ profession-physiotherapist\ in\ Austria$

*Job description/field of activities:* 

Autonomous performance of all physiotherapeutic measures on a doctor's orders in intramural and extramural care with special consideration of functional

relations in the fields of health education, prophylaxis, therapy and rehabilitation, in particular mechanotherapy measures, e.g. all types of kinesitherapy, perception, manual therapy of joints, respiratory therapy, all types of curative massage, reflex therapy, lymphatic drainage, ultrasound therapy, all measures of electrotherapy, thermotherapy, phototherapy, hydrotherapy and balneotherapy as well as profession-specific diagnostic methods and cooperation in electrodiagnostic examinations; furthermore, advice and education of healthy persons in the fields mentioned above without a doctor's orders.

#### Competence profile:

Physiotherapists have acquired the following qualifications for exercising the physiotherapeutic profession with sole responsibility:

1. *Technical-methodological competences* for the autonomous performance of physical therapy. They have learnt to combine physiotherapeutical knowledge and skills with medical knowledge and knowledge from other relevant disciplines as a basis for their autonomous physiotherapeutical actions in order to apply them in particular in the fields of occupational medicine, surgery, gynaecology and obstetrics, geriatrics, internal medicine, intensive care, cardiology, paediatrics, neurology, orthopaedics, physical medicine, psychiatry, pulmology, rheumatology, traumatology and urology. They master the work steps of physical therapy that serve for maintaining, promoting, improving or recovering mobility in the framework of health promotion, prevention, therapy and rehabilitation. Upon completion of their education, they have developed professional ethics governing their actions and activities in a medical and societal context.

## A physiotherapist is able to:

- perform physical therapy as a part of the overall medical process on a doctor's orders; this includes the work steps of problem identification, planning, implementation and quality assurance, evaluation, documentation and reflection;
- 2. identify the health problem of the patient, recognise the information relevant for physical therapy in the medical reports available and, if necessary, contact

- the relevant doctor or other persons responsible to obtain relevant information that is missing;
- 3. realise the limits of the autonomous performance of their profession and identify relations to the applicable legal regulations;
- 4. realise when other healthcare professions and other professions are competent and co-operate in a multi-professional team;
- 5. realise when specific physiotherapeutical measures are contraindicated;
- 6. imagine body positions and movement patterns and realise the effect of symptoms on motion behavior;
- 7. prepare a physiotherapeutical report based on the results of the information obtained and guided by hypotheses verified by examination methods specific to the profession through inspection, palpation and functional examination;
- 8. prepare a therapy plan, define the objectives of physical therapy and implement the therapy plan;
- 9. perform therapies in line with technical and scientific findings and experiences;
- 10.discuss the therapy plan with the patient, adjust it to his/her needs and motivate him/her to co-operate;
- 11.critically review the volume of the measures and the course of intervention, and adjust it to the patient;
- 12.perform physiotherapeutical measures with groups of persons and adequately respond to processes of group dynamics;
- 13.meet the requirements of quality management and hygiene, document the course of therapy as well as analyse and evaluate the results, assess the impact of unphysiological stress on the motion system within the framework of prevention and therapy, perform the physiotherapeutical process within the framework of health promotion and prevention and offer targeted measures promoting development and maintaining health;
- 14.recognise life-threatening conditions and provide appropriate first aid;
- 15.develop, arrange and perform professional activities, especially in the case of self-employment, in line with organisational and managerial principles.

2. Social communication competences and self-competences, in particular communication skills, critical capacity, conflict resolution, empathy, role distance, frustration tolerance, self-determination capacity, self-reflection capacity, the ability to shape and co-determine processes, the ability to work in teams and professional self-perception for exercising their profession.

#### A physiotherapist is able to:

- 1. assess realistically his/her own capacity with regard to technical;
- 2. organisational, co-ordinating and administrative professional requirements, justify his/her own decisions in a responsible way to external actors;
- 3. apply communicative and organisational skills required for accomplishing complex interdisciplinary tasks;
- 4. provide information and explanations in a professional way and establish a relation of trust to the patient or his/her family members;
- 5. take account of cultural and regional needs, lifestyles and values;
- 6. work in line with professional rules as well as economic and ecological;
- 7. principles, meet the requirements of life-long learning and further training obligations;
- 8. with a view to continuously staying abreast of new findings in medical science in order to ensure a high quality level in professional activities;
- 9. contribute to the further development of the profession.
- 3. *Scientific competences* allowing them to understand and plan research processes.

## A physiotherapist is able to:

- 1. retrieve information on recent scientific findings obtained at the national and international level;
- 2. formulate issues of relevance to research in the field specific to his/her profession;
- 3. select and apply relevant scientific research methods and process the data obtained for finding answers to the issues raised;

4. make scientific findings and phenomena usable for professional and scientific development.

#### 1.6. Netherlands

#### Competency profile of the physical therapist

The physical therapist at the EQF 6 level

The context for a physical therapist at the EQF 6 level has been described as 'an unknown, changeable living and working environment, which may include other countries. Physical therapists trained and functioning at the EQF 6 level have to meet the following quality criteria:

- 1. the physical therapist possesses advanced knowledge of the discipline of physical therapy and adjoining disciplines relevant to physical therapy.
- 2. the physical therapist shows critical understanding of theories and principles;
- 3. the physical therapist possesses advanced skills, enabling him to use professional expertise and innovative abilities to solve complex and unpredictable problems, and using these advanced skills to manage complex situations, make autonomous decisions and take responsibility for them, in both predictable and unpredictable professional situations and contexts;
- 4. the physical therapist takes responsibility for promoting his own professional development as well as that of the people employed or managed by him.

The physical therapist at the EQF 7 level

The context for a physical therapist at the EQF 7 level has been described as "an unknown, changeable living and working environment with a high level of uncertainty, which may include other countries". Physical therapists trained and functioning at the Master's level (EQF 7) have to meet the following quality criteria:

1. the physical therapist possesses highly specialized knowledge at advanced level for physical therapy and the adjoining disciplines relevant to physical therapy, which functions as a basis for original ideas and/or research;

- 2. the physical therapist is critically aware of problems of physical therapy and the adjoining disciplines relevant to physical therapy, as well as the interfaces between the various disciplines;
- 3. the physical therapist possesses the problem-solving skills required for research and/or innovation, enabling him to develop new knowledge and procedures, and to integrate knowledge from various disciplines. He uses these skills in complex and unpredictable situations or contexts to independently select, implement, and transform strategic approaches, and to make autonomous decisions and take responsibility for them;
- 4. the physical therapist manages and transforms complex and unpredictable professional contexts that require a new strategic approach. This includes not only complex situations relating to the diagnostics, prognostics, and/or therapy for one client, but also complex situations relating to professional practice at micro, meso, or macro level. He analyzes the problem in a multifactorial and multidimensional approach, after which he formulates a targeted strategy to solve it, discusses this with the client and implements it where possible;
- 5. the physical therapist takes responsibility for contributing to the development of professional knowledge and practice and/or for critically reviewing the strategic performance of teams.

#### Structure of the competency profile

The physical therapist's competencies have been structured on the basis of the CanMEDS model, which focuses on seven competency areas.1 We decided to describe the competencies in terms of areas, to fit in with the system used for medical disciplines (Royal Dutch Medical Association – KNMG) rather than in terms of roles, as the original CanMEDS model does. In our view, the description in terms of competency areas does more justice to the integrated application of competencies in the central competency area of "physical therapy activities".

The competency profile is structured as follows:

- 1. seven competency areas;
- 2. a description of each competency area;

- 3. four so-called key competencies for each competency area;
- 4. indicators as operationalizations of the key competencies.

The competencies have been formulated on the basis of verbs indicating behaviors. The description of the competencies is based on the therapist's actual behavior in professional situations.

The competency areas

Seven competency areas have been distinguished:

- 1. *Physical therapy activities:* The physical therapist uses the methodical approach to provide explicit, conscientious, and judicious assistance to clients with movement problems. His behavior is professional by the standards of the current state of the discipline. He collects and interprets data to enable him to make diagnostic, prognostic, and therapeutic decisions according to the EBP principles within the boundaries of the physical therapy profession. He provides up-to-date, effective, curative and preventive care in accordance with ethical principles.
- 2. *Communicating:* The physical therapist ensures high-quality assistance to his clients and aims at a high level of client satisfaction by keeping up an effective relationship with the client and those close to them and/or others involved. The physical therapist clearly, transparently, effectively, and efficiently communicates with the client during the therapy process, both verbally and nonverbally.
- 3. *Collaborating:* Where necessary, the physical therapist collaborates with the relevant professionals, health insurers, and civil society organizations and government bodies. He participates in collaborative networks and makes the best possible use of the available expertise to ensure high-quality care.
- 4. *Knowledge sharing and scientific research:* The physical therapist works according to the principles of Evidence-Based Practice, contributes to the development of his own and other practitioners' clinical expertise and contributes to scientific research.

- 5. Acting in the interest of society: The physical therapist balances the interests of his client against the interests of others seeking assistance and the interests of society. He practices his profession in a socially responsible way, taking account of factors like sustainability, professional ethics, the legal context, and the social and cultural context.
- 6. *Organizing:* The physical therapist works toward a well-organized practice in order to carry out his profession effectively and efficiently. In a way, the physical therapist acts as a manager for his own professional activities, as well as for the work of other care providers. The physical therapist makes decisions regarding the deployment of resources and staff, goal and priority setting, and policy-making. He organizes his own work, while balancing professional activities and the need to further develop both himself and, where relevant, the care organization for which he works.
- 7. *Professional conduct:* The physical therapist provides high-quality care to his clients, with integrity, sincerity, and commitment. He takes responsibility for his actions and carefully balances his personal and professional roles. He is aware of the limits of his competencies, and acts accordingly. His attitude is transparent and he is prepared to accept assessment of this actions. He is aware of ethical dilemmas, is familiar with ethical standards and complies with laws and regulations.

## Physical therapy activities – detailed description

The physical therapist uses the methodical approach to provide explicit, conscientious, and judicious assistance to clients with movement problems. "Physical therapy activities" is the central competency area, which utilizes all the other competencies. Physical therapy treatment in the stricter sense focuses on professional expertise.

The physical therapist is familiar with the domains of knowledge that are relevant to his own ideas and actions, and can retrieve information on medical research quickly and efficiently. The physical therapist uses the methodical approach to carry out history-taking (if necessary through proxies) and physical examination

and uses the outcome to formulate rational hypotheses about the possible causes and consequences of the findings, identifying rational links between the findings at the three ICF levels and the environmental and personal factors that influence them. He builds up a coherent view of his client's perception of the movement problems they experience in their social and cultural context, the ways in which the client moves in their specific environment and the client's musculoskeletal system with its impairments. The physical therapist possesses the manual skills necessary for examination and treatment. Based on the hypotheses he has formulated, he proposes an effective strategy for supplementary diagnostics, treatment, care, and prevention, while respecting the wishes of the client and their relatives, basing himself on the customary approach, and on a rational and evidence-based approach to medicine. The physical therapist makes appropriate use of technology and is aware of the advantages and disadvantages of particular interventions.

Body of knowledge and skills

In order to select the appropriate intervention for a particular client, and implement it correctly at the appropriate moment, the physical therapist needs to possess skills and knowledge from the following core domains: functional anatomy, biomechanics, (neuro)physiology, pathology, and psychology, but also from knowledge domains like health science, health economics, and organization science. The 2008 National diploma supplement and National Transcript for Physical Therapy functions as the "body of knowledge and skills" and is based on the EQF 6 level.29

Specialist physical therapists have described the body of knowledge and skills relevant to their specialist discipline, derived from the above core areas, at the EQF 7 level, in professional profiles for individual specialist subdisciplines.

## 1.7. Portugal

In addition to the general skills of any healthcare stuff, a physiotherapist has integrated into the various competency systems with which they are associated.

General competencies

Education Level - 6 EQF - Bachelor

Role and general competence: autonomous medical stuff, physiotherapists responsible for the development and maintenance or restoration of movement and its relation to life-long functionality, informed of the latest scientific evidence. Relieve pain and treat or prevent problems associated with trauma, illness, or other illnesses, to improve of clients' functional capabilities, their functional independence and quality of life. They operate within the framework of their professional code of conduct.

#### Clinical competencies

As movement and function specialists, physical therapists use a clinical thinking process that combines specific knowledge, skills and attitudes to provide high quality care that can improve the health and well-being of their patients.

In the clinical field, physiotherapists use a practice focused on the patient / family / caregivers, ensuring their physical and emotional safety. They evaluate, diagnose and forecast, and develop, implement, monitor and evaluate an intervention plan; documented records of patient' assessment, intervention, progress, and outcomes in the context of their intervention. They are responsible for conducting physiotherapy and / or appropriate transition to other specialists or services.

The physical therapist is also a consultant providing functional diagnostic elements of movement and / or suggestions for intervention in the field of physical therapy, useful for the patient and other professionals to make appropriate decisions.

The physiotherapist also applies his clinical skills and knowledge in development, communication and management to the development of individuals, groups or communities. To this end, they plan, implement and evaluate as part of activities aimed at promoting and protecting health and well-being and preventing disease and disability.

#### Communication competencies

As communicators, physiotherapists use effective strategies to share information and improve therapeutic and professional relationships.

Physiotherapists use effective oral and written communication methods to help optimize therapeutic relationships with clients, families, caregivers, and other partners throughout the intervention. They adapt communication strategies to context and use communication tools and technology effectively.

#### Management competencies

As managers, physical therapists manage their own time, resources, and priorities to deliver effective services.

They contribute to organizational excellence and are involved in improving the quality of services provided. They use resources efficiently, provide a safe environment and participate in the supervision of their peers.

Manage patient information and service management in a safe, effective, and ethical way.

#### Cooperation

As employees, physiotherapists work effectively to provide internally professional communication. They help to integrate the benefits, needs and expectations of patients, families and carers. They contribute to effective teamwork and conflict resolution.

#### Promotion of continuous professional development

As promoters of continuous professional development, they carry out a reflective learning process to improve the processes and outcomes of their interventions to satisfy their customers. They operate through a continuous process of critical analysis of available information (scientific and contextual), resorting to research, discussion and application of reliable knowledge in the practice of physical therapy. They develop their capacity for critical reflection to work safely and competently, in various aspects of professional practice, translating into clear results the refinement of the services provided. Cooperate in the management of short- and medium-term continuing education courses academic degree in the specialty.

## Scientific competencies

As scientists, physiotherapists demonstrate a desire for excellence in practice, evaluation of evidence and the contribution of knowledge.

In their practice, they use an evidence-based approach that integrates selfreflection and external feedback to improve personal practice. They are constantly improving about events related to their academic / clinical field. They contribute to the study of students within their field of knowledge, using dynamic learning strategies, focusing on three areas of competence: knowledge, skills and practice.

#### Leadership competencies

As leaders, physiotherapists strive and advocate for a health system that enhances the well-being of society. They manage and commit themselves to design and mobilize actions that promote change, responsibility, risks and consequences of their actions and decisions. They take responsibility for protecting the needs of clients in the healthcare sector, and contribute to healthcare innovation.

They use their skills, their influence and communication skills to share their vision, mobilize and influence their colleagues, society and politicians in promoting and protecting the health system, with a more sustainable and better quality.

#### Advanced Skills

Level of education - 7 or 8 EQF - Master

Role and general competence - Masters or PhD professionals manage risks in unpredictable contexts in certain areas. They can focus on clinical practice, education, research, or management.

Delineation of best practices - the development of competencies and delimitation of the sphere of practice is determined jointly by the professional structure governing the profession and meets the requirements of the Ministry of Health.

#### Specialization

The educational level is continued without disciplinary training, namely after graduation, short and medium-term courses are properly regulated and approved.

## Role and General Competency

A specialist physiotherapist has a common base of comprehensive knowledge, skills and attitudes, allowing him to practice general physiotherapy, to which he adds a recognized and proven process of specialization, which allows him to be more effective, differentiated in this area.

#### Specialization area

Specific area of intervention, process of specialization: recognition, attribution and approval of a specialist's name is the responsibility of the professional structure governing the profession.

In addition to scientific differentiation resulting from the evolutionary course of academic training at levels 6, 7 and 8, a physiotherapist may, at any of these levels, apply for the clinical training process and determine what corresponds to the process of specialization in physical therapy.

Thus, as a specialist physiotherapist has a common knowledge base, abilities and skills, which allows him to practice general physiotherapy, which allows him to be more effective and differentiated in this area.

## 1.8. United Kingdom

The objectives of the learning outcomes are set out in the example of the University of Southampton.

After graduate the **Bachelor's level**, students will acquire competencies in the following areas:

Knowledge and Understanding

Having successfully completed this programme you will be able to:

- 1. recognise normal human structure and function and demonstrate knowledge and understanding of the anatomy, physiology and the dynamic relationships of human structure and function:
- 2. explain the pathological and disease processes and related clinical features of conditions commonly encountered by physiotherapists;
- 3. relate psychosocial concepts and factors that influence patient care in health and illness and underpin physiotherapeutic practices;
- 4. explain the physics, biomechanics, applied exercise science, ergonomics, and theoretical basis of diagnostic, therapeutic and management skills that can be applied to physiotherapy practice;
- 5. assess the evidence based practice relevant to physiotherapy;

- 6. illustrate the context of healthcare provision including structure, drivers, policies service/organisational issues and factors of the NHS that influences the management of self and others;
- 7. evaluate the utilisation of clinical research, audit and governance;

Subject Specific Intellectual and Research Skills

Having successfully completed this programme you will be able to demonstrate appropriate intellectual skills including:

- 8. formation of reasoned judgements and a clinical diagnosis on the basis of a physiotherapy assessment of physical presentation and discussion with patients, together with the results of investigation;
- 9. communication with patients, relatives, carers and healthcare professionals to establish effective therapeutic alliances;
- 10. use clinical reasoning and the best available information and evidence to design and implement appropriate and effective short and long term management strategies and care plans appropriate physiotherapy;
- 11. monitoring patient progress through evaluation of outcomes and appropriate modification of care plans;
- 12. reflection on clinical decisions in light of current evidence, accepted care protocols, and legal and statutory requirements;
- 13. an understanding of health and safety at work requirements and be able to conduct risk assessments;
- 14. engage in debate and discussion in areas of professional controversy and future professional development areas;
- 15. construct reasoned argument concerning the funding and ethics of modern health & social care:
- 16. formulation of a research question, a research design and implementation of the research process

Transferable and/or Generic Skills

Having successfully completed this programme you will be able to demonstrate skills necessary to:

- 17. communicate effectively in a variety of forms to a variety of audiences;
- 18. critically evaluate academic, clinical and professional performance and utilise research skills;
- 19. effectively manage time and prioritise workload to sustain efficient and effective practice;
- 20. work in both individual and team working practice situations, developing autonomy and leadership skills; interact and assist other health care professionals through effective participation in inter-professional approaches to health care delivery;
- 21. utilise problem solving, critical analysis and research skills;
- 22. respond to independent and team working environments through developing autonomy and leadership skills;
- 23. apply the skills needed for academic study and enquiry;
- 24. apply skills of numeracy, pictographic representation and manipulation of data using appropriate software;
- 25. access and acknowledge information from written and electronic sources;
- 26. recognise the significance of clinical effectiveness in the delivery of physiotherapy.

Specific professional physiotherapy skills

Having successfully completed this programme you will be able to:

- 27. understand the legal responsibilities and ethical considerations of professional clinical physiotherapy practice and professional self-regulation;
- 28. apply appropriate physiotherapy assessment and clinical decision-making to choose an appropriate physiotherapy intervention(s);
- 29. apply an appropriate physiotherapy intervention safely and effectively in the core areas of physiotherapy practice;
- 30. discuss goal setting and appropriate outcomes of intervention that are patient centred;
- 31. use manual therapy safely and effectively in the application of mobilisation, manipulation, massage, respiratory and neurological therapy techniques;

- 32. use electrotherapeutic modalities safely and effectively in the selection and application of a range of modalities based on the therapeutic use of electrical, thermal, light, sonic and magnetic energy;
- 33. work in partnership with a range of clients/patients and carers and in a variety of health, community, private and third sector settings;
- 34. communicate effectively with patients/clients, including those with challenging behaviours or communication difficulties;
- 35. demonstrate the ability to use education and teaching skills appropriate to the prevention of illness and injury and in health promotion;
- 36. obtain and record informed consent for the treatment plan;
- 37. maintain accurate records that conform to medico-legal requirements and current data protection legislation.

After graduate the **Master's level**, students will acquire competencies in the following areas:

Knowledge and Understanding

Having successfully completed this programme you will be able to:

- 1 critically understand the knowledge required to practise professionally in the field of podiatry and base your practice on a systematic appraisal of established research findings
- 2 demonstrate originality in the ability to systematically and critically evaluate research findings and generate new knowledge in an aspect of professional practice
- 3 make sound judgements in both simple and complex clinical situations while exercising critical non-discriminatory judgements with the available information.

Subject Specific Intellectual and Research Skills

Having successfully completed this programme you will be able to:

4 work autonomously and accountably in relation to clinical decision making whilst recognising your own limitations and your relationship/responsibility within the multi-disciplinary team (MDT)

5 demonstrate reflexivity in personal and professional activities and integrate appropriate attitudes into clinical practice

Transferable and Generic Skills

Having successfully completed this programme you will be able to:

- 6 demonstrate a highly developed ability to study autonomously and within groups (including inter-professional groups)
- 7 take initiative and personal responsibility for your continuing ongoing professional development (CPD)

Specific professional physiotherapy skills

Having successfully completed this programme you will be able to:

- 8 understand the legal responsibilities and ethical considerations of professional clinical physiotherapy practice and professional self-regulation;
- 9 apply appropriate physiotherapy assessment and clinical decision-making to choose an appropriate physiotherapy intervention(s);
- 10 apply an appropriate physiotherapy intervention safely and effectively in the core areas of physiotherapy practice;
- 11 discuss goal setting and appropriate outcomes of intervention that are patient centred;
- 12 use manual therapy safely and effectively in the application of mobilisation, manipulation, massage, respiratory and neurological therapy techniques;
- 13 use electrotherapeutic modalities safely and effectively in the selection and application of a range of modalities based on the therapeutic use of electrical, thermal, light, sonic and magnetic energy;
- 14 work in partnership with a range of clients/patients and carers and in a variety of health, community, private and third sector settings;
- 15 communicate effectively with patients/clients, including those with challenging behaviours or communication difficulties;
- 16 demonstrate the ability to use education and teaching skills appropriate to the prevention of illness and injury and in health promotion;

17 maintain accurate records that conform to medico-legal requirements and current data protection legislation.

#### **CHAPTER 2**

## ANALYSIS OF FORMATION OF GENERAL AND PROFESSIONAL COMPETENCIES IN EDUCATION OF PHYSICAL THERAPISTS IN CENTRAL EUROPE AND BALTIC COUNTRIES

#### 2.1. Poland

Professional Graduate Competency - Physical Therapist:

- 1. to be able to independently conduct a functional assessment of the effectiveness of the use of physical exercises of a medical orientation;
- 2. to be able to independently conduct a diagnostic assessment of the highest activity of the nervous system: perception, speech, memory;
- 3. to be able to independently assess the psycho-emotional state of the patient, his behaviour, etc.;
- 4. to be able to evaluate the effectiveness and output ability of the musculoskeletal system:
  - to evaluate muscle strength (objective and subjective);
  - to evaluate the norm of muscle length;
  - independently carry out functional tests of physical performance;
  - to evaluate the segmental spinal mobility;
  - to evaluate muscle balance (postural and phase muscles);
  - to evaluate the "game" of joint displacement of peripheral joints;
  - to assess the sensitivity of the most trigger pain points.
- 5. to be able to evaluate the effectiveness of the central and peripheral nervous system:
  - self-palpation of peripheral nerves;

- independently perform voltage tests (ULTT1, ULTT2, ULTT3, SLR, PNF);
- 6. to carry out complex rehabilitation using the proprioreceptive method;
- 7. to carry out comprehensive rehabilitation of children with cerebral palsy and other diseases of the central and peripheral nervous system;
- 8. to conduct comprehensive rehabilitation of children and adolescents with impaired posture;
- 9. to carry out comprehensive rehabilitation of people with diseases and injuries of the nervous system;
- 10.to carry out comprehensive rehabilitation for rheumatic diseases and circulatory and respiratory systems;
- 11.to carry out comprehensive rehabilitation of patients with amputation of the upper and lower extremities;
- 12.to be able to independently select and commission different types of prostheses;
- 13.to carry out physiotherapy procedures using physical factors;
- 14.to be able to independently perform the mobilization of the peripheral joints and motor segments of the spine;
- 15.to be able to independently perform and evaluate electro diagnostic tests for physiotherapy's needs;
- 16.master the techniques of manufacturing gypsum rails and shells;
- 17.to be able to provide first aid in case of threats to human life and health;
- 18.to be able to independently manage a center, clinic or physiotherapy (rehabilitation) institution;
- 19.to organize complex physiotherapy in spa conditions;
- 20.to organize complex physiotherapy in the environment in the patient's home;
- 21.to plan independently and apply specialized physiotherapy methods of sports orientation to improve the health of the disabled and the health of the nation.

## 2.2. Czech Republic

## Professional Graduate Competency - Physical Therapist:

- 1. to have diagnostic, therapeutic, psychological, and ethical knowledge in attempting a global analysis of the patient's condition;
- 2. to carry out a physical examination of the patient;
- 3. to carry out diagnostic research methods (x-ray, ultrasound) and interpret the results:
- 4. to recognize and correctly select and apply physiotherapeutic measures in acute conditions of the disease (KRL FNKV, IPVZ);
- 5. to carry out special functional assessment of both individual systems and the individual as a whole especially kinesiological, ergodiagnostic, psychological and social diagnostics;
- 6. to have indications and rational prescriptions of individual physical therapy procedures and natural healing resources;
- 7. to apply rehabilitation as a national process, sectoral legislation and social protection of the population;
- 8. to develop a specific short-term and long-term rehabilitation plan;
- 9. to apply methods of physical therapy, ergotherapy to restore impaired functions and systems of the body;
- 10.to draw up a spa treatment plan for a specific disease and include spa treatment in a long-term rehabilitation program;
- 11.to independently develop a physiotherapy plan and implement it in accordance with the methodological procedures outlined in the field of physiotherapy;
- 12.to independently carry out functional examinations, kinesiological analysis and control of the patient's condition;
- 13.to apply the methods and techniques of therapeutic exercises individually or in groups;
- 14.to select and use orthopedic appliances;
- 15.to independently perform certain physiotherapy procedures;
- 16.to implement disease-oriented methodologies, practice daily activities and self-sufficiency;

17.to collaborate with other health care providers in the field of physiotherapy;

18.to cooperate with a social worker and employees of the department;

to instruct patients and their families, especially parents of children who need to be treated, to carry out homework and daily work related to their disability.

#### 2.3. Slovenia

The main objective of the program is to train a physiotherapist as an independent healthcare professional who can work independently or in a team with accepted interdisciplinary skills in planning, conducting and evaluating physiotherapy. He will be able to work in the field of primary prevention, treatment and rehabilitation. In addition to basic natural and medical knowledge and in addition to special knowledge of the management of procedures and methods of physiotherapeutic treatment, he will also gain knowledge in the fields of communication, psychology, management, clinical research and ethics.

General Graduate Competency:

- 1. to be able to integrate theoretical and practical knowledge in solving complex situations;
- 2. to have basic and specific information and knowledge in the field of social and pedagogical sciences related to physiotherapy;
- 3. to be able to analyze professional problems and be able to synthesize professional solutions with the expected consequences;
- 4. to be able to independently diagnose all body systems;
- 5. to be able to independently evaluate the effectiveness and efficiency of planning the process of rehabilitation treatment;
- 6. to be able to clearly and unequivocally explain their choices and experience to professional and non-expert audiences, including in the international environment;
- 7. to be able to work in an interdisciplinary group and be tolerant of accepting and considering of constructive criticism and comments;

- 8. to be able to ethical thoughts and actions in case of ethical dilemmas in physiotherapy;
- 9. to be able to possess and apply basic physiotherapy research methods;
- 10.to carry out physiotherapy measures independently, taking into account indications and contraindications to procedures;
- 11.to apply differentially the methods and techniques of physiotherapeutic treatment;
- 12.to evaluate and document the functional status and physical abilities of the patient, as well as check their independent work;
- 13.to maintain, establish and improve the psychophysical abilities of healthy people and people with disabilities in the development of other diseases;
- 14.to develop independently physical therapy programs for patients based on an assessment of the patient's functional systems and personal characteristics;
- 15.to use independently the methods and techniques of motor therapy to stimulate physiological mechanisms and establish their balance;
- 16.to set goals for physiotherapeutic treatment with the participation of the patient or his family members;
- 17.to contribute to a clearer diagnosis and prognosis when evaluating data by highlighting the problems and goals of physiotherapy in collaboration with the doctor and other team members;
- 18.to check the effectiveness of individual therapeutic procedures, preventive health education programs;
- 19.to use methods to support, promote and restore public health;
- 20.to monitor the correct physical lifestyle and guide their future patients through appropriate pedagogical actions to ensure the prevention of diseases;
- 21.to use basic care techniques to provide qualified first aid for injuries and threats to human health and life.

## 2.4. Bulgaria

Competence of a graduate of the specialty "kinesitherapist" (preference is given to social factors of a person):

- 1. to analyze economic health problems and develop alternatives to solve them;
- 2. to evaluate independently the alternatives and make the choice of the best alternative in compliance with the health policy, available resources and the effectiveness of their use;
- 3. to allocate resources according to health needs and priorities;
- 4. to evaluate the effectiveness of the health care system;
- 5. to identify independently the difficulties and problems faced by patients with disabilities (or temporary disability);
- 6. to identify appropriate methods, forms and approaches to intervention to solve problems;
- 7. to develop a long-term rehabilitation plan;
- 8. to perform certain kinesitherapy procedures independently;
- 9. to select and use orthopedic appliances;
- 10.to collaborate with other support staff (multidisciplinary team);
- 11.to independently apply kinesitherapy measures to increase patient independence; measures to preserve the dignity of the client and increase his independence;
- 12.to use modern information and rehabilitation technologies in the context of social work.

#### 2.5. Latvia

Skills:

Shared Skills of the Branch:

- 1. is able to critically evaluate the validity and credibility of different theories, methods and techniques of physiotherapy;
- 2. uses evidence-based and scientifically grounded theories of physiotherapy in one's professional activity;
- 3. keeps to professional ethics and confidentiality;

- 4. identify the problems and needs of patients and social groups;
- 5. is able to set aim and appropriate tasks of the therapy, draw up therapy plan;
- 6. chooses and applies appropriate physiotherapeutic methods and techniques;
- 7. works as a member of an interdisciplinary rehabilitation team;
- 8. cooperates with patient's family;
- 9. can evaluate the process and results of a therapy;
- 10.engages in preventive and educational work;
- 11.arranges one's own work environment and the work properly from the point of view of ergonomics;
- 12. observes requirements for labour safety and hygiene;
- 13.summarizes, analyzes, interprets physiotherapy-related information;
- 14.develops research projects in physiotherapy and implements them;
- 15.writes scientific and methodical articles;
- 16.employs research findings to facilitate the development of rehabilitation and public health.

## Specific Skills in the Profession:

- 1. has good knowledge of evaluation possibilities and methods in physiotherapy;
- 2. is able to evaluate functional disorders and abilities of a patient;
- 3. can evaluate the extent of patient's impairment, incapacity, involvement and disability;
- 4. has competence in technologies of physiotherapy, knows how to employ them;
- 5. facilitates patient's joining active social life;
- 6. selects methods to assess patient's condition;
- 7. evaluates patient's condition;
- 8. provides patient with clear explanation of physiotherapeutic information;
- 9. chooses appropriate physiotherapeutic treatment methods for a patient;
- 10.provides patient with proper physiotherapy;
- 11.assesses the result of the therapy;
- 12.develops and coordinates physiotherapy treatment plan for a patient in cooperation with other specialists of rehabilitation team;

- 13.is active to collaborate with other members of rehabilitation team during the process of treatment;
- 14.educates patient and his/her family members;
- 15.provides consultations to patient's family members, other specialists on the issues of physiotherapy.

#### General Skills/Abilities:

- 1. has communicative skills:
- 2. works in a team and individually, advances the teamwork and its continuous functioning;
- 3. does one's own work independently and is able to make the necessary decisions;
- 4. anticipates and evaluates the potential impact of the decisions;
- 5. provides arguments for one's own viewpoint;
- 6. develops and keeps professional contacts with other specialists;
- 7. obtains, analyzes, selects information;
- 8. draws up, systemizes and keeps information documents;
- 9. improves one's professional knowledge and skills by continuing education;
- 10. observes the existing legislation in one's own work;
- 11.elaborates recommendations for perfection of legislative documents, projects and agreements;
- 12.knows how to put the knowledge in economics and business into practice;
- 13.takes part in activities of professional associations and NGOs;
- 14.informs society about the importance of healthy living and rehabilitation in restoring of health, prophylaxis;
- 15.has the ability of creative thinking;
- 16.uses computer for processing, storing and presenting information;
- 17.puts theoretical knowledge, professional competence and skills into practice, and improves them constantly.

#### Competence:

- 1. Successful gaining of professional competence and doing of research under the PBSP "Physiotherapy" requirements in health care is possible only in close cooperation with the Programme staff and the fellow students.
- 2. Students obtain, select and analyze information of health care, rehabilitation and physiotherapy and put it into practice, as well as take decisions and solve problems in the discipline of health care or the profession of physiotherapy.
- 3. Study process strengthens general human attitudes (empathy, tolerance, sympathy) and health care-related attitudes, thus developing awareness and understanding of health and life as values and maintaining of health as a vital precondition for human well-being. Students have good knowledge of professional ethics of a medical specialist and observe the principles of ethics defined by the Declaration of Helsinki, as well as normative documents of the Republic of Latvia and respect patient's rights in their professional activity.
- 4. Students learn to show initiative, make decisions and take responsibility of their effect and result, to evaluate critically and introduce changes in their professional activity, if necessary.
- 5. Students are capable of assessing the impact of their professional activity on society. They take part in the development of the respective professional sphere by doing research, analyzing and applying the findings, and persistently improving their knowledge, skills and professional competence.

#### **USED SOURCES**

- 1. Cor de Vries, Leo Hagenaars, Henri Kiers, Maarten Schmitt The physical therapist a professional profile. Netherlands, 2014, 40 c.
- 2. Emanuel Vital, Maria António Castro, Patrícia Almeida, Eduardo Brazete Cruz O Perfil do Fisioterapeuta. Portugal, 2018, 23 c.
  - 3. Susanne Weiss Healthcare Professions in Austria, 2017, 168 c.

4. <a href="https://www.cmkp.edu.pl/wp-content/uploads/2017/01/1-">https://www.cmkp.edu.pl/wp-content/uploads/2017/01/1-</a>

## FIZJOTERAPIA\_Program\_Podstawowy-2018.pdf

- 5. http://www.fvz.upr.si/sl/fizioterapija
- 6. http://www.ir-rs.si/sl/Univerza\_v\_Ljubljani/
- 7. https://www.portalvs.sk/sk/studijny-program/fyzioterapia4
- 8. https://www.ipvz.cz/seznam-souboru/1542-rehabilitacni-fyzikalni-medicina.pdf
- 9. https://www.infoabsolvent.cz/Obory/ProfilAbsolventa/5342N002/Diplo movany-fyzioterapeut
- 10. https://pdfs.semanticscholar.org/8412/3906f075683a87688f33b0ee205bb fd05eeb.pdf
  - 11. http://www.swu.bg/university-profile.aspx
- 12. <a href="https://www.uni-ruse.bg/Faculties/FOZ/Documents/ECTS%20-%20SD%20-%20BG.pdf">https://www.uni-ruse.bg/Faculties/FOZ/Documents/ECTS%20-%20SD%20-%20BG.pdf</a>
  - 13. https://www.uni-ruse.bg/Faculties/FOZ/specialities
  - 14. http://www.nsa.bg/en/faculty/department,21/branch,70
- 15. <a href="https://www.ug.dk/uddannelser/professionsbacheloruddannelser/socialogsundhedsuddannelser/fysioterapeut">https://www.ug.dk/uddannelser/professionsbacheloruddannelser/socialogsundhedsuddannelser/fysioterapeut</a>
- 16. <a href="https://www.ug.dk/uddannelser/bachelorogkandidatuddannelser/kandidatuddannelser/kandidatuddannelser/sundhedsvidenskabeligekandidatuddannelser/fysioterapi">https://www.ug.dk/uddannelser/bachelorogkandidatuddannelser/kandidatuddannelser/kandidatuddannelser/kandidatuddannelser/sundhedsvidenskabeligekandidatuddannelser/fysioterapi</a>
- 17. https://www.fysio.dk/kurser--uddannelse/karriere-og-uddannelse/grunduddannelsen
  - 18. <a href="https://www.retsinformation.dk/forms/r0710.aspx?id=180536">https://www.retsinformation.dk/forms/r0710.aspx?id=180536</a>
- 19. <a href="https://www.smh.aau.dk/digitalAssets/68/68381\_81530\_bilag-3a-sund\_nyeuddannelser.pdf">https://www.smh.aau.dk/digitalAssets/68/68381\_81530\_bilag-3a-sund\_nyeuddannelser.pdf</a>
  - 20. <a href="https://www.sdu.dk/da/Uddannelse/Kandidat/Fysioterapi">https://www.sdu.dk/da/Uddannelse/Kandidat/Fysioterapi</a>
  - 21. <a href="https://utdanning.no/studiebeskrivelse/fysioterapi">https://utdanning.no/studiebeskrivelse/fysioterapi</a>
  - 22. <a href="https://utdanning.no/yrker/beskrivelse/fysioterapeut">https://utdanning.no/yrker/beskrivelse/fysioterapeut</a>
  - 23. https://fysio.no/Bli-fysioterapeut/Norske-utdanningssteder
  - 24. <a href="https://www.oslomet.no/studier/hv/fysioterapi">https://www.oslomet.no/studier/hv/fysioterapi</a>

- 25. <a href="https://www.uib.no/en/education">https://www.uib.no/en/education</a>
- 26. https://www.ntnu.no/studier
- 27. <a href="https://bjorkneshoyskole.no/?gclid=Cj0KCQiAheXiBRD-ARIsAODSpWOSkqP5eLwLivnF9aKjDrpSCIQgFAviUkwLX7sxDHe44ncAmHElP">https://bjorkneshoyskole.no/?gclid=Cj0KCQiAheXiBRD-ARIsAODSpWOSkqP5eLwLivnF9aKjDrpSCIQgFAviUkwLX7sxDHe44ncAmHElP</a>

#### GkaAuDYEALw\_wcB

- 28. <u>www.laurea.fi</u>
- 29. https://www.finlex.fi/sv/laki/ajantasa/1994/19940559
- 30. <u>file:///Users/home/Downloads/Oppimisen%20ja%20osaamisen%20arvio</u> inti%20amk-tutkintoon%20johtavassa%20koulutuksessa%20(syksy%202018-).pdf
- 31. <u>file:///Users/home/Downloads/Assessment%20of%20learning%20and%</u> 20competences%20in%20bachelor's%20degree%20programme%20(autumn%20201 8-).pdf
- 32. <u>https://www.student.med.lu.se/stod-redskap/terminstider-kursplaner/fysioterapeutprogrammet</u>
- 33. <a href="https://www.student.med.lu.se/sites/student.med.lu.se/files/utbildningspl">https://www.student.med.lu.se/sites/student.med.lu.se/files/utbildningspl</a> <a href="mailto:an-fysioterapeutprogrammet-rev-2017-06-07.pdf">an-fysioterapeutprogrammet-rev-2017-06-07.pdf</a>
- 34. <a href="https://www.med.lu.se/master\_medicinsk\_vetenskap/mer\_information\_o">https://www.med.lu.se/master\_medicinsk\_vetenskap/mer\_information\_o</a> m\_programmet
- 35. <a href="https://www.gov.uk/government/publications/the-nhs-constitution-for-england/the-nhs-constitution-for-england#staff-your-responsibilities">https://www.gov.uk/government/publications/the-nhs-constitution-for-england#staff-your-responsibilities</a>
  - 36. <u>file:///Users/home/Downloads/B160\_BSc\_Physiotherapy.pdf</u>
  - 37. file:///Users/home/Downloads/MSc\_Physiotherapy%20(1).pdf
- 38. <a href="https://www.southampton.ac.uk/healthsciences/postgraduate/taught\_cour">https://www.southampton.ac.uk/healthsciences/postgraduate/taught\_cour</a> <a href="mailto:ses/msc\_physiotherapy.page#%3Cfont\_style%3D%22vertical-align%3A\_inherit%3B%22%3E%3Cfont\_style%3D%22vertical-align%3A\_inherit%3B%22%3E%D0%BC%D0%BE%D0%B4%D1%83%D0%BB%D0%BB%D0%B8%3C%2Ffont%3E%3C%2Ffont%3E