Annotation. Purpose: to justify the need for the use of the main provisions of international classifications to determine the state of health improved and effective rehabilitation of persons with disabilities. Material: analyzed more than 50 sources of literature and international instruments on the main provisions of international classifications. Results: conducted a thorough analysis of the content of international classifications. Scientifically substantiated the need for their use in the practice of physical rehabilitation of persons with disabilities. Identify important issues methodically theoretical security goals and objectives of certain types of rehabilitation for persons with disabilities. Subject of discussion questions remain concerning the evaluation criteria of life and human health, the very structure of the rehabilitation process. At the present stage there is scientific and methodological basis of the formation of a new modern tools for determining the conditions of human health arising from the disability. The principles laid down in the international classifications reflect the goals and objectives of rehabilitation, in particular physical rehabilitation of persons with disabilities. Conclusions: these classifications can be successfully used effectively in the process of assessing the level of life and human health, as well as the very structure of the rehabilitation process. Use of certain elements of the international classifications significantly increase efficiency in the provision of rehabilitation assistance to persons with disabilities and improve the methodological approaches to the use of physical rehabilitation. Keywords: health, rehabilitation, disability, limitations, vital activity, social, insufficiency, classification.
devoted to reviewing of diseases’ classification (ICD) in 1989 [9, 10]. ICN is actually three dimension model of functional restrictions and functioning restrictions’ conceptualization. As per ICN there are three aspects of disease’s after effects: materialization of pathological processes- disorders or impairment; objectification of pathological processes – restriction of life functioning (disability); “socialization” of disorders and restriction of life functioning – social insufficiency or handicap. ICN interprets social insufficiency as such defect of an individual, which results from disorder or restriction of life functioning, owing to which a person can fulfill only restricted role in society or cannot fulfill it at all (depending on age, sex, social or cultural environment). There are marked out the following important aspects of this concept. Individual or his (her) surrounding pays too great attention to those deviations from standard, which were found in anatomical structure, function or character of functioning. Evaluation of such deviations depends on cultural norms, so as a person can manifest social insufficiency in one group and do not show it in other ones, considering time, place, status or role of an individual. ICN contains classes of after effects of chronic diseases and disability (see table 1).

Table 1

<table>
<thead>
<tr>
<th>Classes of disorders’ and traumas after effects</th>
<th>After effects on organism’s level</th>
<th>After effects on individual’s level</th>
<th>After effects on personality’s level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disorders in organism’s structures and functions</td>
<td>Limiting of life functioning and reduction of workability, under which it is possible: 1) adequate behavior 2) communication 3) movements 4) motion of upper limbs 5) control of body 6) self provisioning 7) situational reduction of workability 8) realization of special skills</td>
<td>Social insufficiency, conditioned by inability for: 1) physical independence 2) mobility 3) practicing ordinary functioning 4) studying 5) professional functioning 6) economical self-sufficiency 7) integration in society</td>
<td></td>
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<tr>
<td>1) mental</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2) other psychic ones</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3) speech</td>
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<td></td>
<td></td>
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<tr>
<td>4) hearing and vestibular</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5) eyesight</td>
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<tr>
<td>6) visceral and metabolic</td>
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<tr>
<td>7) motion</td>
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<td>8) causing ugliness</td>
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<td></td>
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<tr>
<td>9) general</td>
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</tr>
</tbody>
</table>

For implementation of ICN in practice of rehabilitation aid to population in different countries at WHPO Committee of experts was formed and its specialists saw the problem in several directions [9, 10]. Under clear reasons with rendering aid to patients, attention is paid to acute diseases, which include such diseases that result in recovery, maintaining of structures and functions as well as workability without any distortion of personality’s status and basics of life functioning, human system of values and methods of their realization. Accordingly, doctor often feel himself free from further observations of patients and patient fells the same concerning doctor’s services. The other case, if diseases are chronic, which become more frequent in all countries of the world. With chronic diseases as well as with disability the state of human organism changes owing to appearing morphological and functional deficit; also abilities for life functioning change, which determine progressing of personality.

ICN is understood as “key to rational control over chronic disease and disability”. Relations between disease as pathologic process, which takes place in organism, and its after effects are rather difficult. In comments of WHPO experts’ Committee there was present even idea about principal impossibility to classify all complexity of this phenomenon. But it became possible profoundly, from positions of sciences about man –“organism-individual-personality” – to classify all after effects by levels, reflecting the essence of a human nature: at biological (organism) level, at psychological (individual) level and on social (personality) level. They are three classes of after effects of chronic diseases and disability, which were reflected in “International nomenclature of disorders and restrictions of life functioning and social insufficiency”.

Connections between every element within each class of after effects and between elements of different classes are actually rather complex. However, exactly determination of such connections for health related influencing on them is the task of rehabilitation treatment. Diseases, as well as their after effects cannot be regarded straightly or from
disease to insufficiency. There takes place also reverse effect, when social ill welfare results in restricting of life functioning and, accordingly, to functional disorders and diseases. Vicious circle is also possible, when one or several chains are decisive both concerning after effects of disease and increasing of this disease’s clinic or progressing of new one.

Besides, as on to day there are problems of determination of concepts, reflecting the essence of diseases’ after effects; rather important is adequate terminology. ICN was presented as a document of WHPO in English and French; in countries, which adopted ICN, translations were used; and in these translations authenticity of terms, classifying classes of after effects, is not always observed. Technology of evaluation of measurements, quantitative, exact definitions of any after effect of disease are closely connected with it. In our opinion it is necessary to distinguish concept “disorder of functions”, “restriction of life functioning” and “social insufficiency”, because clear definition of these concepts and full fledged determination of after effects, connected with them, have great legal importance. It is connected with the fact that in practice there appears demand in legal evaluation of level of “disability” (as per ICN) – physical, psychological and social losses as results of reasons of disease. Adequacy of terminology of nomenclature, coordinated understanding of terms is important in organization of rehabilitation process and development of its scientific methodology on the base of international cooperation.

As per ICN single concept of disease’s after effects is reduced to the following. In human organism some deviations from standard appear, both in-born and acquired later. Different xeno- and endogenous etiological factors influence on a person and start cause functional and structural pathological changes of organism. Pathologic changes can be visible and invisible. Visible pathological changes are interpreted as “symptoms and signs” and are components of clinical progressing of a disease. Above given data witness that disease is the following sequence: etiology – pathology – manifestations.

Specialists distinguish “clinical state” or personal understanding, that he is ill or has some disorders. Depending on symptoms and disorders that result from disease person’s behavior and functioning can change, i.e. there appears reduction of life functioning, including disordering of workability. Disease result in reducing of life functions, functional activity and individual’s functioning and, further, disorders at personality’s level. When disease results in reducing of person’s life functioning, it acquires social character and finally results in social insufficiency of a person [6].

Specialists mark out the following after effects of a disease: disorders – materialization of pathological processes, restriction of life functioning (RL) – manifestations and objectification of pathological process and social insufficiency – socialization of disorders and RL of a person.

In estimation of health disorders – it is any loss or abnormality of psychological, physiological or anatomical structure or physiological functions; it is deviation from standard in a person’s biological state and determination of characteristics of this state are given by doctors, who can make conclusions about any deviations in physical or mental functions, comparing them with standards [13].

ICN recommends nine main sections of abnormalities (see table 1), which are characterized by loss or deviations from standard organism’s physiological functions and which can be temporary or constant. These disorders include abnormalities, defects or losses of limbs, any organ, part of tissue or other parts of body; defects of functioning of systems or mechanisms, including mental functioning.

Ordinary human functioning is integration of psychological (psychic), physical and social functions, which function as a single system. RL is any restriction or absence, resulted from insufficiency of ability to fulfill I functioning in standard for age and sex limits and, being a connective link between disorder and social insufficiency, is a component of complex or integrated kinds of functioning, which are usual for an individual, such as fulfillment of different tasks, mastering of knowledge and etc. RL, as abnormality, can be temporary or constant, recoverable or irreversible, progressing or regressing. RK can also be as psychological response to physical, sensor or other disorder. RL in everyday life is reduced to hindering of individual’s existence and functioning. In compliance with ICN RL also includes the following abilities: self-serving (ability to maintain primary, effective, independent on other persons existence, including functions of personal self care and other everyday functioning, personal hygiene; ability to move independently or overcome obstacles, to keep balance in the frames of domestic, public and professional functioning; ability to study, i.e. to receive and teaching of knowledge (general, professional and so on); having skills and habits (social, cultural, domestic); ability for labor functioning, i.e. ability to fulfill work in compliance with requirement, content, scope and conditions of the fulfilled work; for independent orientation in environment, for perception and analyzing of own state and appropriately respond to changes of circumstances; ability for communication or contacting with people, maintaining of usual public relations with receiving, processing and transmitting of information; ability to control own behavior, i.e. ability to be conscious and adequate in everyday life and in responses to social-legal norms [9].

Social insufficiency (de-adaptation) is socialization of disorders or restriction of life activity, resulted from some deviation in health state, from inability of an individual to meet social norms. A person with social insufficiency becomes unable to play the so-called “life roles” (criteria of survival); ne (she) becomes too dependent on medical or social establishments [2, 15].

Considering the fact that social insufficiency results from abnormalities or RL, person can play only restricted role in life of society or can not play any role. Conception “social insufficiency” includes three aspects: too great attention of an individual or his (her) surrounding, to deviations from standards, which take place in anatomy, function
or in character of functioning; consideration of time, place, status and role of an individual, under which appraisal of deviations depends on group’s or society’s cultural norms and in connection with which a person can be socially insufficient in one group but be quite sufficient in other; appearance in group of an individual with health related deviations from norm is accompanied by negative attitude [1, 16].

In compliance with ICN (see table 1) specialists distinguish social insufficiency (de-adaptation) resulted from restriction of physical independence, mobility, ability to fulfill usual activity, ability to receive education, vocational education, economical independence, ability for integration in society.

As example, we can mention characteristic symptoms of social insufficiency, which results from restriction of ability for education: normal education; intermittent education, when educational process is interrupted by staying in hospital; release from some kinds of functioning (inability to participate in in some kinds of education or professional training, normal work but with shortened work hours or work week); education ot vocational training, including application of auxiliary means, means of technical aid; education and vocational training, including combination of usual teaching methods and technical aids; education and vocational training, which are possible only with the help of special technical means; inability to receive education.

In literature there exists great number of works, devoted to attempts to classify RL depending of heaviness of abnormalities. For example, L.S. Gikina et al. [4] classified RL depending on abnormalities’ heaviness into 5 functional groups: light, moderate, significant, strongly expressed and full disorder. Other specialists prefer 3 stage gradation of RL heaviness. In many countries of the world ICN was accepted as high quality tool of organization of state’s functioning in different health related branches. For example, in France, owing to application of ICN, they achieved higher results than it was earlier, especially with solution of social care addressed distribution. In Germany and Netherlands ICN was used for evaluation of patients and disabled workability. In Belgium and Italy it was used for enriching of communicative conditions of disabled people’s life. In Switzerland ICN helps to solve insurance problems. However, in these and in other countries (USA, Canada, Spain, Great Britain, China, etc.) this international classification is recognized as having wider significance [1]. As example, we can supply using of ICN in Russia, where this classification was accepted, mainly, as conceptual standard of solution of disabled person’s problems. On this base, with the help of advanced international experience, they upgraded governmental Russian system of rehabilitation of persons with steady absence of workability. In Russia medical labor expertise system, which appraises workability, was transformed into medical-social expertise, naturally combined with rehabilitation system and single governmental system of medical-social expertise and rehabilitation of patients and disabled. In 1991, in Russia principles of ICN in evaluation of steady after effects of diseases and traumas were put in the base of children’s disability determination in the process of medical-social expertise. Later, in 1997 this approach to determination of disability was expanded to adult population of the country [1, 8].

In opinion of many specialists, including WHPO experts, ICN, which was recommended to world community and published in 1980, requires upgrading. First of all it is connected with the fact that it does not elucidate role of social and physical environment both in formation of disease’s after effects and in their overcoming. This fact is regarded as advantage of purely medicalization of disablement. Detail analysis of all external in respect to human organism and personality, to natural and cultural (social, economical) conditions of appearance and development of disease and, at the same time, overcoming of all combination of disease’s after effects shall be recognized as necessary. Besides, ICN of 1980 elucidated and appraised, mainly, after effects of disease, which are always characterized by ruining. However, estimation of patient’s and/or disabled person’s state as well as determination of his rehabilitation potential require determination of recreational reserves’ degree or compensation of disorders and restrictions, present as no that moment, and estimation of individual dignity of personality.

In 2001, 54th International assembly of health protection, after changing of strategy of medical approach to social direction, basing on results of long-term tests, adopted “International classification of functional limitations of life functioning and health” (ICL), which, unfortunately, like ICN was not adapted to conditions of Ukraine and even was not translated into Ukrainian. ICL was translated into Russian and adapted in St. Petersburg advanced training institute of medical experts [7]; in SRI of social hygiene, economics and management of health protection, named after M.A. Semashko, RAMS [10]. For distribution and adaptation of ICL (2001) it is necessary to have official permission of WHPO and in this connection, when presenting of this classification’s data, we used materials of M.V. Korobov et al [17], and data of A.V. Potapov, O.V. Sergiyeni and T.G. Voytchak [5, 11, 12].

Substantial distinction of new classification from earlier adopted is that it regards in integrity such states and processes as: health, disease, further progressing of structural disorders and organism’s functions as well as need in appropriate rehabilitation measures [17, 19, 20, 23]. In ICL it is also noted that conception “health” actually includes all aspects of human life (psychic, physical and social), which engage certain information field, which, in its turn, is divided in separate elements, called health domains and domains, connected with health (see table 2).
Table 2

<table>
<thead>
<tr>
<th>Components</th>
<th>Part 1: Functioning and limitation of life functioning</th>
<th>Part 2: Contextual factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Functions and structures of organism</td>
<td>Activity and participation</td>
</tr>
<tr>
<td>Domains</td>
<td>Organism’s factors</td>
<td>Spheres of life functioning (tasks, actions)</td>
</tr>
<tr>
<td></td>
<td>Organism’s structures</td>
<td></td>
</tr>
<tr>
<td>Parameters</td>
<td>Changes of organism’s functions (physiological)</td>
<td>Potential ability to fulfill tasks in standard conditions. ‘Tasks’ fulfillment in real life situation</td>
</tr>
<tr>
<td></td>
<td>Changes of organism’s structures (anatomical)</td>
<td></td>
</tr>
<tr>
<td>Positive aspects</td>
<td>Functional and structural wholeness</td>
<td>Active participation</td>
</tr>
<tr>
<td>Negative aspects</td>
<td>Disorders</td>
<td>Limitation of functioning</td>
</tr>
<tr>
<td></td>
<td>Limitation of life functioning</td>
<td>Limitation of ability for participation</td>
</tr>
</tbody>
</table>

In adopted classification domains contain information, which rather completely reflects functioning of an individual on physiological, psychic (personality) and social levels. In ICL there are new qualities of life functioning, videlicet “activity” and “participation”, in which “reductions or losses of some abilities at level of personality’s potentials, at level of realization of these potentials in social life with the help of any supporting measures or in usual for individual conditions of life functioning are grouped” [5, 21].

Alongside with it there were specified some domains, which reflect state of organism’s functions and structures; such qualities as activity and participation are described in all aspects of life functioning. Besides, all ICL domains are presented both in positive and negative aspects. RL is appraised by 5-points scale: from 0% (absence of any problems) to 96-100% (expressed limitations). In adopted classification there was introduced generalized concept of RL of different levels of human functioning on physiological, individual and social levels, including disordering of structures and functions of organism, limitation of human activity and ability to participate in social life. Results of individual’s RL examination permit to determine the received information in the form of certain codes (corresponding to codes of ICN-10). But coding of such information can be significant only in cases, when RL is determined (negative aspects of individual, considering heaviness of disorders of different functioning’ kinds).

For better using of the classification unified factor of negative scale of disorders’ heaviness was introduced. In ICL there is presented system of determination of heaviness of activity limitations and limitation of participation in social life and its application for composing of individual rehabilitation program [22, 23, 24, 25, 26, 27], its is a classification of health and all health related circumstances, in which “Standard regulations on creation of equal
opportunities for disabled persons” are realized and on the base of whose application it becomes possible to actually equalize right of healthy and disabled persons.

**Conclusions:**
Thus, analysis and generalization of data from special literature, international classifications and instructive-methodic recommendations witness about formation of new, modern instrumentation for determination of such health related states, which appear after chronic diseases and with disablement. Principles, embedded in international classifications ICN and ICL reflect targets and tasks of rehabilitation, in particular physical rehabilitation with chronic diseases and disabled persons. The presented above classifications can be successfully applied with evaluation of level of life functioning and health as well as the structure of rehabilitation process. Application of ICN and ICL elements will substantially increase effectiveness of rehabilitation aid to disabled persons and improve methodological approaches to application of physical rehabilitation.

**References:**


