

HEALTH: SYSTEM COMPONENTS AND CONCEPT

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INTRODUCTION

The solution to the issues of managing the health of people (an individual, family, population, etc.) should contain, first of all, an understanding of the systematic nature of the object itself, secondly, the systematic nature of the environment in which it exists and, finally, the systematic nature of unlimited ways of existence in it, due to compositional characteristics of the object and the environment.

Awareness of the complexity of this issue solving has created a lot of shortcomings in the current organizationally simplified systems for protecting people's health, which are unable to tackle the complex issues of protecting and maintaining people's health, especially in extreme situations (epidemics, environmental disasters). All the deficiencies have long been manifested and known. They are as follows.

First, until now, in the health management of all the above objects, direct indicators of their health are not used, only their manifestations: birth rate, incidence, mortality and more.

Second, integral indicators are rarely used, but the average values of the above-mentioned manifestations of health are widely used, indexed on different numerical grounds.

Third, the connection with the environment of existence, the way of life in it, with the quality and accessibility of the health system, and finally with the parameters of life expectancy, are not explicitly reflected in the indicators of health manifestations.

Fourth, all health manifestations indicators are tied to the average territorial, national or some better indicators in other countries of the world.

Fifth, there is still no systematic methodological and methodological consistency of the used indicators of health manifestations and, consequently, there are no incorrect (artificial) technologies for using these indicators in making managerial decisions on the protection, preservation and development of public health.

These shortcomings are known, but they have been used for more than a century in the formation and management of health systems in all countries (taking into account the WHO recommendations), although these indicators are not used in the health systems themselves – only indicators of the resources of the corresponding activity circulate in the system.

Proceeding from this, the problem of finding a working (operational) definition of health that fixes the commonality and differences of individual aspectual definitions of health for the subsequent access to direct health indicators with the aim of forming the ideology and technology of the human health management system and the corresponding organizational structures for implementing of this medical and socio-ecological process remains relevant.

1. System structure of the medicine objects

In this study there was developed the algorithm of targeted system analysis of any medico-social and medico-biological objects¹.

According to it for studying a system object *any of them is always seen from two sides: of an external observer and internal composition*. Such bilateral consideration of the object where the “external” and the corresponding “internal” “exactly coincide with each other”, leads to the fact that the notion of “mechanical interaction” can be translated into the concept of “understanding”.

At the same time, three leading properties agreed with each other are fixed; the following ones belong to “*internal*”:

- **dependability** – property of the system, which allows reasonably rely on the performance of services for which it is intended;

- **modifiability** – property of the system to change in a controlled way in order to maintain a given level of dependability;

- **comprehensibility** – property of accumulation of knowledge about the system itself and the environment, which enable it to compare the results of their own functioning with that of the other systems and the environment for their existence, as well as to make decisions about modifying or changing their own behavior. We called this property genetic parameter of the system (based on the term “genesis” – development).

These intrinsic properties are fully in accordance with the external characteristics (properties) in any system, namely, with *stability, manageability and observability* respectively.

Taking into consideration the concept of “universe” as an expression of unity of the whole and diversity, tranquility and motion of the objects under study and knowledge about them, system environment acts as a reality and its fragments - as the unity of its aspects (analysis points). With such understanding, the analysis of the system object should be in the form of a triad:

<thing, communication, property>

with the singling out of its characteristics under the scheme:

<structure, function, organization>

where the brackets fix not only the unity of the system, but also the composition of this unity with singling out of specific concepts.

¹ Тимофеев Ю.О., Таралло В.Л. Концепції охорони здоров'я та інтерфейсний підхід до їх реалізації. *Хист.* 1993. № 1. С. 24–28.

In these cases, the system parameterization of any medico-social (or medical and biological) object can be performed in two ways: external - in the form of a triad: <structure, function, structure>

and internal – in the form of a triad:

<composition, chart, diagram> .

There is the following explanation of these triads: specificity of the existence of any system is fixed by the unity of its structure, functions and organization, where its state (from an external observer’s standpoint) is recognized as a specific composition and operation of the object functioning scheme implemented by an appropriate diagram of its activities displays.

On this basis, it should be realized that the world (population, health, etc.) by real diversity of its manifestations fixes certain environment of appropriate systems existence, where individual invariants of their activities manifestations concretize a specific area of knowledge about the environment (as the characterization of its diversity). And it is this area of knowledge which determines the inner world of the system and its individuality.

It should be also understood that the relationship of the world and system finds its realization in terms of “global” and “local” environment, respectively, reflecting the outside world of the system existence in the first, and in the latter its inner world.

The ratio of these environments outlines subject circle of the system, which manifests its activity and on the basis of which the universe of knowledge and concepts of the object is created.

Within the framework of the system analysis ideology we singled out the following aspects of the consideration of medicine objects, which correspond to basic properties of the classical system:

<morphological, functional, genetic>

and propose the following scheme of matching ties of properties, aspects and characteristics of the medico-social (and biomedical) objects (Table 1).

Table 1

Triads of consistency (matching) and similarity of fragments, objects and aspects of the system environment in the medico-social and biomedical research

Universe	Basic properties of system		Aspects of system analysis	Characteristics of the n-th fragment of object	
	Internal	External	Morphological	Internal	External
	Dependability	Resistance		Composition	Structure
	Ability of modifying	Manageability	Functional	Scheme	Functioning
Comprehensibility	Observability	Genetic	Chart	State	

This approach produces a full range of aspects to consider any medico-social (medical and biological) object, including a human, population, their fragments, makes it meaningfully more adequate to the canons of medical theory and practice, as well as more constructive for searching methods of system measuring of population health.

Understanding of the unity and the differences of all components of the triad:

<morphology, function, organization >

and triads:

<structure, functioning, state>

that represent a holistically all system object (the first triad) as well as any of its fragment (the second triad) allow showing the consistency of concepts “organization” and “state”, where the latter reflects the observable features of the object, which include “health”.

Such algorithm of work with the concept of “population health” and fragments of the latter can be used for settling the burning problems of both population health management, and the health care system in particular.

So far in the world statistics the concept of “public health” or “population health” is called “statistical”. They are represented by its complex of demographic variables (fertility, mortality), level of physical development (mostly children and adolescents), as well as morbidity, disability and mortality.

As for the relationship of this concept with the individual’s health, then by I.B. Richmond’s statement², such connection is due to “planetary community of natural and social environment factors, the level of socio-economic development, states and way of life of the population, the global nature of the epidemiological and demographic processes”. At the same time, he stressed that the term “public health” is more difficult in comparison with the “individual health” and is subject to the qualitative and quantitative analysis and evaluation.

We believe that this is due to the original approach to the definition of these concepts as different ones, the relationship between them in the theory of medicine was not found. Only this can explain the inability of access, using any of the dozens of current well-known definitions of “health”, to its integral dimension or, in other words, all existing definitions just “do not work”.

The above scheme of the system analysis of medico-social and medico-biological objects allowed suggesting the possibility of existence and, therefore, the opportunity of access to both “generic” and “aspect” concepts of “health”. The latter includes “population health” as well as other common ones “individual’s health”, “family health” and others. These definitions

² Richmond I.B. Currents in American medicine: A developmental view of medical care and education. Cambridge (Mass.). 1970. P. 95.

should have a common “core”, common “base” and a general algorithm for the internal and external transcription of their elements.

Within the decryption of the system “public health - the state of the environment” and its subsystem “individual’s health - the state of the environment” developing the solution was supposed to find not only a system generic and aspect concepts of “health”, but also an access to the coherence between the aspect concepts of “population health”, “individual’s health” and “family health” (taking into account the current direction in the formation of practical public health). At the same time it was assumed to find access to the main components of the concept of “population health” with practically feasible possibility of switching to an integral dimension of the latter.

In the above deciphering there was used the triad of basic properties of a system by which we managed to enter the universe of the conceptual apparatus presented in the tables “matching of concepts” (Table 2, 3).

A person is known to be a biosocial system. But the analysis of “biological” and “social” in the person, their similarities as well as differences did not give the answer what is the bridge between them that unites them. In addition, calling the person and population a system researchers do not always clearly identify the main features of this system, which naturally could not lead to true (correct) definition of health indicators of concrete system object.

Table 2 presents the triads of similarity (coherence) of aspect analysis of a man and his health, and in the Table 3 there are the same triads, but for determining their similarity in the population study.

Without touching upon the question of searching for details that make the concept of “public health”, let us consider the main aspects of a man considering and access to aspects of the population studying agreed with them by the Tables 2 and 3.

As indicated above (see Table 2) the triad of any basic properties of any system is: from the viewpoint of the internal composition:

<dependability, manageability, observability> .

They form the universe of the conceptual apparatus of any system object and allow singling out the above basic triad of aspects of the analysis of a human and a group of people (family, generation, population, populations, etc.):

<morphological, functional, genetic >

where the brackets fix indivisibility, integrity of the complex of concepts included therein.

Within these aspects a person as a system (as integrity) is represented by the following triad of manifestations of *internal* symptoms:

<biological, psychic functioning in society, bio- social >

which are implemented *externally* (considered by an external observer) as a triad:

Table 2

Triads of consistency (similarity) of aspect analysis of a man and his health based on the basic properties of the system

Basic properties of the system		Aspect analysis of system objects, fragments					
		Man (object)		Health (fragment)			
Internal	External	Internal	External	Internal	External	Internal	External
Dependability	Resistance	Biological	Organism	Biological	Organism	Processes composition	Processes structure
Ability of modifying	Manageability	Psyche of functioning	Activity (individual behavior)	Psyche of functioning	Activity (individual behavior)	Functioning (process flow)	Functions, made by processes
Comprehensibility	Observability	Biosocial	Individuality	Biosocial	Individuality	Organization	Registered state

Table 3

Triads of consistency (similarity) of aspect analysis of a man and population, their health based on the basic properties of the system

Basic properties of the system		Aspect analysis of system objects, fragments					
		Man (object)		Population (object)		Health (fragment)	
Internal	External	Internal	External	Internal	External	Internal	External
Dependability	Resistance	Biological	Organism	Social	Group of people	Processes composition	Processes structure
Ability of modifying	Manageability	Psyche of functioning	Activity (individual behavior)	Psyche of functioning	Way of life (collective behavior)	Functioning (process flow)	Functions, made by processes
Comprehensibility	Observability	Biosocial	Individuality	Social organization	Social-medical status	Organization	Registered state

<organism, activity, person >

Then fragments of a person acting as individual system objects (phenomena) agree on *internal* composition:

<structure, functioning, organization >

from the viewpoint of an *external* observer:

<structure, function, state>

reflecting the similarity and the indivisible unity of the basic aspects of the analysis of the object as a whole.

In a similar analysis *population* as a system social and medical object, will be *presented* in the table of agreements (Table 3) *while the external examining* by the triad:

<a group of people, lifestyle, social and medical status>

reflecting its *internal* composition by triad:

<social, psychic of functioning, social organization >

Presented structuring of a human (and/or a group of people) allows to conclude that any observed state of these objects (including “health” as one of the fragments of his state) in a consistent unity of all aspects is a derivative, resulting reflection of a certain modification of activity of the object with a specific “morphology” in a particular the anthropogenic environment.

Morphological traits are different in humans and population (Table 3). The man is a biologically created body with all its specific structures (nervous, muscle, vascular and other subsystems), and morphological parameters of the population as a system are based on gender, age, production, territorial or other (bio-social) and purely social, collective principles under which “biological” is deep inside, it is hidden. That is population, populations, generation or any other group of people is not just the sum of individuals or personalities (socio-biological objects). It is socially derived organism organized in a certain way in the society where “morphological” is always represented exclusively by social features.

Functional aspect of human and population is reflected in their lifestyle completely dependent and associated with the morphology of these objects, and has, according to this, different functional characteristics (by behavior).

Genetic aspect is a resulting (genesis=development) integral characteristics of indivisible unity of morphology and functions derived from it, this pattern is generated by their unity. This very aspect allows seeing and identifying individual in each object (person, group of people) at all stages of existence while using general formalistic approach, and according to “*invariant of organization state*” of the observed object.

Considering human and population in the genetic aspect it should be emphasized that the “health” of these objects is manifested in the “*state*” of their “*organization*”. It is the latter that differs significantly in the individual and the population, firstly, on the basis of differences in their morphological

“structure” as shown above; secondly, on the basis of differences in the laws and the content of functioning (“psyche”) of these objects (due to differences in the “morphology”, “structure”). Finally, the “state” (genetic aspect) of the individual’s identity as a set of its qualitative characteristics (character, temperament, lifestyle, etc.) is also different from the qualitative characteristics of the “state” of the population: by sex, age, national, manufacturing and many other statuses. On this basis both “health” as one of the leading integrated qualitative characteristics of these objects and many different manifestations of their states in the dynamics – as vital processes throughout life, differ in content. If for a person it is a physical development, diseases, employability, legal capacity etc., then for the population it is a vital resource, health resource, the average life expectancy (total, healthy, unhealthy), resistance to extinction factors, morbidity, mortality, survival and others. Although, a medical concept of “health” is just one of many genetically derived states of these objects.

Given transcription of the concept of “health” shows that “the health of the individual” is a pattern (genetic integral characteristic) generated by the operation of a complex, from bio-social point of view, object, its morphological structures in particular, its own socio-economic system. In its turn, the “population health” is a pattern (genetic integral characteristic) generated by the operation of complex social organism (group of people) in artificially created socio-ecological environment; here even such formal biological characteristics as distribution of the population by sex and / or age are presented from the standpoint of social cohesion of the group, quality indicators of this connection in social communication throughout the life course.

At the same time, considering the structure of the complex multi-level (of socio-natural origin) of the world system where population, population group, person, organism, organ, cell, etc. are its elements, it should be noted and emphasized that the relation of “social” and “biological” in any living object depends on the level in which it is situated, where its life passes. Moving from the top down to a single cell, the effect of biological traits increases and of social ones gradually reduces and, conversely, increasing perfection of a living system increases the amount of social features in it. It should also be understood and taken into account that “biological” and “social” complement each other, penetrate into each other and absorb each other, affecting genetic characteristics of any living object in integrative way and at the same time build harmony of its organization.

2. Generic and systemic definitions of health

However, taking into account that the medical aspect of health is just one of the integral properties of the object, its status there is the need to provide consideration of human and / or population in the interface.

Thus, considering the medical aspect of health we can identify the pathological and non-pathological states (e.g., healthy - sick, the disabled - not disabled, etc.) both in the domestic and in the medical plan. The disease also represents one of the qualitative characteristics of the object health. It is, like disability and death can only be considered as a separate, private version of the evolution of integral characteristics of object functioning in some designated environment throughout its life cycle.

Then, if the researcher precisely indicates the environment in which the object (an individual or group of people) operates, it is possible to designate the peculiarities of origin and development certain health states in it, as well as a certain state of its carriers - individual and / or population corresponding to the health.

When considering a person from the above point of view in the system of “a man – his environment (including health care)” the definition of “health” can be given the following wording:

“Human (individual) health is an invariant of organization of the state of purposefully acting (functioning) personality that expresses the unity of its morphological, functional and genetic aspects, as well as the ability to solve the problems appearing throughout the life”.

Then the definition of “health” in medical transcription will be as follows:

“Health of population (populations) is an invariant of organization of the state (social-medical status) of a group of people with clearly defined way of life that expresses the unity of the structural and morphological, functional, social and genetic aspects, as well as the ability to regulate their (group’s) problems of social communication throughout the period of collective coexistence”.

The consistent unity of the basic properties of “health” both in person and in the population, where “health” acts as a generic concept with a general structure of its organization is a common thing in these terms.

What differs them is morphology (composition, structure) of a human and population. In this case, morphological differences are realized in different spectra of these objects operation in an environment where “psyche” (as a way of life) of a particular individual transforms into population’s “collective psyche” (social communication).

On this basis, we obtain the conclusion that the formal structure of the concepts “individual health” and “population health ” is overall, the same and their main difference is build and structure of objects.

Fixing specific components of health in the terminology and from the point of view of the different branches of knowledge allows to take into account the multidimensional nature of this concept, develop the universe of the concept “health” and while studying the interface approach to determine necessary individual highly specialized modifications of this concept for any objects.

For example, taking into account the widespread development of family medicine the definition of the concept “family health” can be given based on a system similar to the construction of the above definitions “health” (to emphasize the structural unity of concepts):

“Family health is an invariant of organization state of purposefully functioning resistant reproductive group of people (family), reflecting the unity of its morphological, functional and genetic aspects, as well as the ability to solve problems of offspring bringing up, family preservation, maintaining parents’ health and other problems of social communication that arise at all stages of joint, collective life”.

It should be noted that special determining of the concept of “invariant” in the interface environment emphasizes its stability, the immutability of its structure at all levels of an object existing and aspect dependence of the content of the “invariant” on the basic properties of the system.

The above definitions provide a new consideration and analysis of integrative characteristics of the main system objects of the health care effects which allow singling out common integral indicators of their state by using the basic properties and aspects of health and social care systems. At the same time, they allow isolating and identifying the generic concept of “health”.

“Health is an invariant of organization of state of purposefully functioning system object that expresses the unity of its morphological, functional and genetic aspects, as well as the ability to solve problems arising throughout the cycle of its existence”.

Definition of this concept structure put it next to the concept of “code”. This allowed to come to determining of the levels of its functioning by singling out of specific solutions and desired recreational activities aimed at the protection, preservation and development of human health, with the creation of appropriate and, at the same time, adequate to its quality, as well as relevant internal structure of the population, system of its health control (and the health care system, in particular).

In the life cycle, population health should be seen as a dynamic process where the state invariant is just one of many options (shown at a particular time in a particular environment for a particular group of people, etc.).

It should also be borne in mind that people in the course of its existence, realizes the whole gamut of functions, every of which is responsible for a particular activity. Due to this activity population changes itself and its environment existence. (In another aspect of the analysis a set of the environment conditions is a domain of the focus and quality of people’s activities on the protection of their environment in terms of maintaining their own health and life).

At the same time, the health should allow population to reconstruct the surrounding physical and social environment so that it is less hostile to a man and his health.

From this point of view, health serves as an essential state for a normal life. Based on this, a person (or people) is understood as an active fragment of the environment, which owns the appropriate status of the object of this environment (*morphological aspect*), as well as its function (engine of reconstruction and revival - therapy - *functional aspect*) and, simultaneously, the embodiment of the reconstruction laws that a person or people implement in the process of its vital functions (*genetic aspect*).

The above allows us to consider “health” not as a “state” but as an “assessment of the state” (*qualitative determination of existence*), which is expressed by different names – depending on the point (level) of view (consideration) and the language of certain groups of the human community, reflecting their view (requirements) to the human (population)state. Invariant core of all these modifications of considering is the “*quality of health*” as a qualitative certainty of population (person) lifestyle.

From this perspective, the definition of a particular state of a person (group of people) in the specific environment provides an opportunity to consider, examine and evaluate “health” only in the appropriate context.

A person (population) throughout the life cycle changes its environment with the time being (years of life) and being in dynamic interaction with it, gradually changes its social status (status of child – in the family, preschooler, pupil, student – in the respective institutions: in kindergarten, school, college, university, an employee -at a company, institution; unemployed, pensioner, etc.). For the population status groups can be structured by gender, age, education, occupation, place of residence, resources, etc. Clearly fixing social status of the object under study there can be assessed its health in the related aspect: a child - full-term, premature; adult – or labor- and legally capable, not labor or not legally capable; disabled, not disabled, a student, an employee, a military, etc.

Such aspect considers health from the standpoint of the functional characteristics of an object, using its state estimate. (Although systematic analysis gives many other possibilities of considering the object of observation and, thus, each of them represents different object facets, its properties).

Of physicians’ specific interest is a ratio and harmonization of the concepts “health” and “disease”. It is known that medicine has long “strongly deepened” in the concept of disease, “that we have neither terminology nor classification of health. This particularly applies to the social and psychological aspects of health, where only rough terminology is used and there is no necessary classification”. At the same time, most researchers in their works oppose “disease”, “health”. This fact is explained by the lack of a systematic analysis of these concepts in general and their actions, in particular.

Above, “health” was regarded as a “state” and as a “process” and considering these and other characteristics of the system object genetic

parameter of its organization. In the same aspect, but for other purposes of analyzing the objects of “health”, the latter can also be seen as a “marker of quality of existence of these objects”- population, individuals, families, etc. In this approach “health” is no longer a property, but a property characteristic - from the standpoint of protection of population (a person) life, its existence. And then presence or absence of disease can be also attributed to the characteristics of the properties of “health”.

We emphasize that most of the existing definitions characterize disease as a “state”. But this concept can be regarded as a *characteristic of quality of state*. In addition, the “disease” itself can be regarded as a “process” taking into account its temporal characteristics imposed on the concept of “existence”. It must be noted that the concept of “disease” is not static, it changes and requires treating health as a combination, integrity, responsive to the external environment; on this basis, the concept of “disease” serves as **a process** that reflects changes in a particular state.

Thus, “disease” appears as a set of actions related to risk factors, as an aspect of the operation and modifying of an object’s state.

In addition, “disease” can act as a “name” reflecting the specific morphological changes. The latter is recorded by certain symptoms, syndromes (with quality “-”).

At the same time, in the systemic understanding of the body integrity “disease” appears as a *characteristic of the state of the object as a whole*, where its particular recorded signs (symptoms) reflect the characteristics of the flow of local processes in the object (person) that appear integrated in the “holistic” object, particularly in dynamics. At the same time, the concept of “local processes” reflects meaningful spatial and structural characteristics of the flow of certain types of pathological processes, such as cardiovascular, pulmonary and others.

In addition the disease is always acts as a kind of *temporal characteristics* of pathological processes reflecting *the intensity of their course* (acute, sub-acute, and chronic). From this point of view, the concept of “*disease exacerbation*” and corresponding clinical symptoms that have been observed should be regarded as characteristics of altered states, realizing at the same time, that they represent changes (disturbances) in the frequency, rhythm of processes flow. Then exacerbation can be defined as not frequency of processes flow, as a characteristic of processes flow (!), but not a disease, as a state of the organism. In this examination, exacerbation is a violation of the ratio of processes flow in the body (which is especially important to note!), this is a change in the level of processes flow, their stability and, at the same time, a manifestation of a new periodic process, which leads to a new state.

For example: the patient could have the temperature marking state of the body (taking into account its integral characteristics). The rhythm of other

fast processes in all subsystems of the body adjusts to this new state. It may just be a new (temporary or long-term) mode of operation of the object (body). Although temporary parameter of ongoing process is relative: it is associated with both internal protective abilities of the organism, and external influences (treatment).

The researcher should be aware that changing rhythm of fast processes, reconstructing the mode of operation of one of the systems (subsystems) of the body, requires a certain energy support of this transformation, and at the level of the whole organism (exchange change, its frequency, etc.). And it can initiate various degrees restructuring of morphological structures of the body that happens very often. At the same time, energy restructuring of operation of any of the body systems (subsystems) is “fueled” by reducing and even total falling of its other energy subsystems. The foregoing shows that the recorded signs of altered states of the body are not always markers of functioning of only one observable subsystem (cardiovascular, pulmonary, excretory, etc.). While measuring and evaluating any changes in the body a researcher usually keeps records (reading) of not “clean” features inherent in the specific subsystem operation, but recording of *index, integral characteristics (parameters) derived from the total course of many interrelated processes – in their composition (which reflects an indivisible integrity of an organism)*.

A similar conclusion can also be used for the object “population” while evaluating specific indicators of its life and, in particular, its health.

That is, if there is a clear fixing up of observation aspect (population) one can define the integral parameters of different levels of functioning of this complex system according to the above triadic schemes.

This conclusion aims at finding and creating other, in contrast to existing, informational, methodological and technological organizational models to provide population health and health care management.

The following should also be noted. Using the above tables of comparability concepts in the system environment both concepts -“health” and “disease”, act as genetic, resulting parameters of the object status (population, family, person, etc.) showing inseparability of morphology from functions generated by it. Consequently, there is a conclusion of constructive generality of these two concepts, previously considered as opposing.

There can be made a generalized conclusion: “Health is the most important characteristic of the dynamics of human (or population) states, where illness, injury, disability or death are only particular signs of quality of this state”.

Thus, having fixed that disease is one of qualitative characteristics of human (population) health associated with the concept of “morphology” and

“function”, the latter can be read (diagnosed) “back” (inverse system analysis) on the basis of classifying (“genetic”) name of the disease”.

In this case, the term “ill health” in its meaning acts as a genetic “state” or “process”, which reduces (or makes it disappear) the ability to perform some “functions”. For example, if there is bio-morphological illness it’s a function of reproduction (or fertility function), if there is a bio-social illness it is performing of certain types of work, responsibilities, etc. Although, as noted above, in any “medical” state “biological” and “social” are inseparable and we can only speak of their share in the implementation of various health processes – both in person and in the population.

Thus, we can emphasize “ill health” in the form of disease, temporary or permanent disability is not opposed to “health”. “Ill health” does not deny “health” having many shades; “ill health” is the lack (reduction or increase) of certain functions or, in other words, the functional aspect of the concept in a single system, which has the name “health”.

Presented grounding of relation, general and differences in the concepts of “health” and “disease” gives you opportunity to consider them from a common methodological, methodical, organizational and technological points of view, provides a basis for understanding the similarities and common database of information about these processes and challenges the existing “norms” and “standards” in medicine today.

Understanding community of concepts “health” and “disease” where “disease” is only qualitative characteristics of “health” in the life cycle of the latter (which can be judged only in the temporal cycle of the existence of the object under study) allows creating common methods of observation, measurement, analysis as well as prognosticating and correction of these processes (their management).

The above aims not only to make corrections in the “norm”, “standards” of the controlled characteristics today, at a given time it is also necessary to clarify and correct planned and acting health improvement national and regional programs, which do not take this into account.

CONCLUSIONS

Basic and system factors in the structure of objects observed in practical health care (of human, population) are derived and justified, their general and distinctive characteristics are determined.

Systemic definitions of health are derived: generic and basic aspect (individual health, family health, population health); a transcription of system concepts is given.

The system construction of the concept of “health” (of individual, population) is defined as the “code” for solving the problems of its management (protection, care and development)

SUMMARY

Entering the system of human and public health management involves the priority of determining the systemic components of these objects of study in medicine, the systemic components of their condition.

The study was carried out with the involvement of targeted system analysis adapted to medical-social and medical-biological objects. On its basis the leading properties of individual and population (internal and external), and also the current observed characteristics of these objects are singled out. All of them are combined in accordance with traditional medical knowledge, targeted aspect analysis of individual and population and their leading condition – health. This combination is realized within the indivisible trinity of concepts of morphology, functions and organization of objects. The latter facilitates the transition to the observation of their structure, functioning and condition.

The involved algorithm of the analysis allowed reaching the system generic and aspect concepts of health (health of individual, family, population) with the separation of their common and personal characteristics.

The obtained results establish a systematic theoretical basis for the creation of a supervised, controlled and managed human health management system and the relevant public health system.

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