

ELEMENTS WHICH CAUSED THE APPEARANCE OF INNOVATIONS IN MINISTRY AND THE CHANGE OF THE MANAGER'S FUNCTION IN HEALTHCARE

Elnur Smajić¹

¹University Clinical Center Tuzla, specialist in internal medicine, Tuzla, Bosnia and Herzegovina,
e-mail: elnurs@gmail.com

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Summary

The modernization of health care as a whole in the era of automation and the increasingly frequent use of ICT is noticeably reflected in the change in the structure of the education system of health workers, the program content of personnel education, the duration of education and training of personnel, mass at all levels of education, and more. All this resulted in significant changes within the entire health and education system. Due to the multitude of technical and technological achievements, the area of application of new technique and technology in the process of education and professional development could not remain outside the influence. By introducing this new factor (technological-technical) into education, it was learned that systematic changes will be needed, i.e. not only changes within the teaching forms and methods, but also changes in the function of the manager in the health organization. The existing models of education are beginning to be unsuitable, and the health organization, as one of the institutions of special social importance, is beginning to lag behind contemporary trends.

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1 INTRODUCTION

The acceleration of scientific and technical changes that are taking place in health care in parallel with economic and socio-political transformations has become more and more significant every day for the health care system, which has found itself at such a turning point as civilization has never known. The large steps taken by modern science bring entire systems of social reality into a very precarious situation, thus destroying the previous structures of values and knowledge in health care that were unchanging and universal for a long time. The impermanence of scientific knowledge and its constant variability bring the health system of our civilization under such radical changes that will have unfathomable consequences for generations to come. Understanding the interdependence of scientific discoveries in general with economic and social development will determine our future because the educational system and its modernization will be given due recognition, especially in the health sector.

2 THE INEVITABILITY OF TRANSFORMATION OF EDUCATION IN HEALTHCARE

The presence of certain understandings that scientific and technical progress stops in front of traditional education because of its orthodox and inelastic attitude towards modern changes in all human domains of work and life, sounds surprising, paradoxical, and frightening. All the more so when it is known that the scientific understanding and progress of society has always been most tightly linked to the teacher and the school. The gap between social wills in relation to everything that educational institutions give us now presupposes urgent social interventions, the postponement of which will be more and more expensive and dramatic every day.

Continuous reform interventions at all levels of the health and education system, and social movements on the basis of which solutions are approached, mark a historical transformation not only of changes within the educational system but also of its feedback effect on social resources. The various application and exploitation of scientific, technological and technical achievements bring great social changes not only in the economic but also in the health and educational field.

The modernization of health care as a whole in the era of automation and the increasingly frequent use of ICT is noticeably reflected in the change in the structure of the education system of health workers, the program content of personnel education, the duration of education and training of personnel, the mass at all levels of education, and more. All this resulted in significant changes within the entire health and education system.

Due to the multitude of technical and technological achievements, the area of application of new technique and technology in the process of education and professional development could not remain outside the influence.

By introducing this new factor (technological-technical) into education, it was learned that systematic changes will be needed, i.e. not only changes within the teaching forms and methods, but also changes in the function of the manager in the health organization. The existing models of education are beginning to be unsuitable, and the school, as one of the institutions of special social importance, is beginning to lag behind contemporary trends. Educational technique and technology gradually imposed itself as an imperative of modern social progress and, looking for its adequate place in teaching, it had to meet the demands of changing the function of managers in healthcare organizations as a kind of educator.

The interdisciplinarity of the study of phenomena related to the field of health and professional development opens up various problems related to the technological and technical structures of modern teaching. The personality of the manager in healthcare as a teacher, as an official participant in the educational activity, and especially his personal characteristics, in the new conditions of work, which are conditioned by the scientific-technical, psychological, biological, physiological, ecological and other achievements of modern society, appears now in new dimensions.

Reform attempts in the world and in Bosnia and Herzegovina (us) are assumed to arise from crisis situations in the health and education systems, especially from the point of view of the growing disproportion between the quality offered by the education systems and what is imposed in a super-industrial society as the need for accelerated professional, mostly by higher education.

Analyzing the reform interventions in the field of health and education, we come to the knowledge that the function of health managers in the complex of necessary changes is, if not the most important, then certainly one of the main factors in the entire system.

3 UNCERTAINTY OF PROGRESS

Just as in the industrial revolution, technology and its versatile application pushed man from the physical participation of his workforce in immediate production, thus the already rich assortment of innovations of a technical and technological nature imposes itself in the process of medical work, relegating the healthcare manager as a teacher from the sphere of broadcasting with his speech, that is, of personal participation, offering at the same time such technical solutions in front of with which both health and educational

sciences found themselves in a dilemma. Will the technique of perfected electronic classrooms, television, computers, programmed machines, film and other media force the health manager as a teacher to retire or to maximally correct his previous status? These dilemmas have appeared recently and are causing a certain amount of uneasiness and professional uncertainty among some teachers and health professionals. This has led to a situation where some teaching and health professionals have become more conservative in relation to innovations than the traditional backwardness of some other activities.

The structure of the highly developed industry in healthcare requires personnel who will be able to permanently follow the acceleration of production trends, social standards and economic-political stability. Serious demands are placed on healthcare and educational organizations, healthcare managers and teachers: to provide the ideal type of healthcare professionals in the shortest possible time and at the lowest possible cost. In addition, a wide selection of the most modern technical means is offered.

4 CRISIS OF PROFESSIONAL EDUCATION IN HEALTHCARE

Is a crisis of professional development in healthcare on the horizon? The crisis of professional development and education in healthcare has been present on the world stage for a long time, not only in developing countries, which are underdeveloped, but also in highly developed countries. Through a short analysis of the periodization of the socio-economic development of highly developed countries, we will notice that the "waves" of the explosion of certain levels in society take place alternately (better to say legally) in a logical sequence: socio-economic and political conditions pave the way for the expansion of education at the

first (elementary, i.e. primary) level, followed by expansion in the second level (directed education, professional, vocational) and, finally, higher education - third level.

The issue of the second level, the level of education, has become a basic political preoccupation in many countries for a long time. Being between the growing needs for technically more perfect health care and the abundance of new scientific knowledge, heterogeneous and traditionally burdened second-level education shows its mutation not only with a crisis in the content of work, methods, forms and means, then with an "explosion" of knowledge, a system of learning and evaluation and student work, the concept of the teacher education system, but also the unstable function of all teachers involved in it.

If changes in society, and especially in health care, will require an economic basis for the modernization of the existing educational system, then as part of these predictions, the problem of forming managers as educators for those generations that will live in the 21st century cannot be avoided. . Are these the current healthcare workers who were educated until a few years ago? Is it possible to know with certainty what their technical-technological (teaching) efficiency is? In the last case, are there such personnel at the current faculties and schools who are capable of making such radical changes in the process of education of (future) healthcare workers that will meet the "profile of the healthcare worker of the future"? What changes in the health education system (second level) leave the possibility of further development of (new) medics? Where to with the existing staff who are nearing the end of their working life? What should be done to reorganize the education of healthcare workers who are constantly "crying" for new branches of medicine?

Answers to many questions must be asked and viewed in the interdependence of several factors, and among them are problems related to changes in education, on the one hand, and the impact of scientific and technical changes on social needs in the sphere of not only health but also education, on the other side.

5 THEORIES OF LEARNING AND CHANGES IN EDUCATIONAL METHODOLOGY IN HEALTHCARE

Among scientists, in the last few years, the understanding that the "explosion", that is, the expansion of technique and technology has entered a serious dimension, and that their "perfection" and maximum automation have partially solved several of the most urgent problems humanity has been around for many years. There are also plenty of those who have always been distrustful of technical technological inventions in medicine. However, the inspiration and fearlessness of those who want progress seems to have no limits. Their visionary assumptions of the broadest humanistic dimensions seem to be only a temporary obsession of their complicated "composition, which occupies and fascinates the average health worker far more than one might expect.

Such tendencies seem to have been fueled by the abundance of new research in the last few years in biology, biochemistry, genetics, medicine, physiology, philosophy, and especially psychology, towards the search for solutions to the uncertainty faced by man in order to solve the present problems (ecology, nutrition, industry, childbirth, treatment, upbringing and education). Beliefs that scientific research in psychology will be able to be applied very quickly in the daily life of modern man seem to have gradually started to be lost precisely because of the contradictions in

the understanding of psychologists as fundamental problems that psychology has faced since the time it separated from philosophy. This gap leaves at the same time the vagueness of psychology in everyday educational practice and the enormity of the potential of still insufficiently examined human characteristics trapped in new technology. Perhaps some "hidden" human potential will be able to develop faster only as part of new technical inventions. But their vagueness and surprises have a different prognosis in all spheres of society.

Neither philosophers, nor psychologists, nor pedagogues, nor doctors can remain indifferent to the challenges posed by genetics.

The human sphere of expanding knowledge and power will now be reduced more and more to the concept of human wisdom, which, without the slightest hesitation, must be studied far deeper in the interdependence and dialectical contrast within, genetics, psychology and pedagogy. The sciences have gone so far in individual intensive research that scientists are now faced with much more serious and complex problems in unifying and realizing their achievements, especially in terms of the development of personality traits.

Humanity has always sought the greatest source of its potential in the rational application of knowledge, as well as in the education of the young generation. The historical path of psychology, which straddled between "abstract", rational and concrete natural life, could not be lost in the contemporary currents of philosophical and psychological directions, although it sometimes seemed that originality had been found in "modern" psychology or that they were intense research gave "recipes" for solutions to age-old problems, especially in the field of learning and education.

Thus, among numerous theories of learning, external and innate factors of knowledge must be equally respected, and their application in terms of education and training in terms of professional development is becoming more and more complex.

Long-term disagreements among psychologists about whether maturing and learning have a dominant influence on the development of human behavior, however significant it may be for the development of psychology, at the same time introduced serious obstacles to the creation of a firmer basis regarding the educability of certain personality traits and boundaries. The scope and possibilities of education in general.

Proponents of the Gestalt theory of learning, based on numerous researches, present the understanding that psychological contents, specifically learning processes and flows of human thinking, do not consist of individual parts (elements), so they are not formed by simply summing up their parts, but represent a unique whole. When learning and solving some problems, according to the Gestaltist's understanding, some phases that are typical (preparation, incubation, illumination and verification) and completely given inevitably take place. Thus, it is said that learning does not represent the accumulation of experience, but rather its permanent and expedient re-organization. Very significant research with children and people in classes was carried out by Wertheimer, who believes that teaching based on logical-formal and associative foundations significantly disrupts and slows down the development of productive thinking in young people and adults. His warnings that after a certain time the learned rules, forms, theorems and laws are forgotten, thus hindering problem solving, can be accepted to a certain extent, because when students understand essential instead of formal procedures, then they will, without knowing (or remembering)

formulas, rules and theorems to be able to successfully solve problem situations. This understanding is essentially far more acceptable than the associationist and formal-logical type of teaching, but for those of us who deal with the education of young people, the question remains unsolved:

- How quickly can all "students" solve problems in this way?
- What about those students who are lagging behind or have a very hard time solving problems? and
- Is everyone interested in acquiring new knowledge and skills completely, able to solve problems without learning formal procedures, laws, theorems, formulas and the like?

However, the Gestalt theory of learning made a significant contribution to the development of teaching because, contrary to the formal-logical type of teaching, it enabled teaching to be directed much more towards learning with understanding and design. Therefore, even now, the question of the speed of understanding certain contents in classes where modern techniques and technologies in the direction of ICT are applied is more serious and expedient. The problem arises in situations when the educator presents certain content to all interested parties at the same time with the help of some media, while knowing that the consumption of this content will not occur with the same speed and intensity for everyone. His role must change significantly in relation to the adaptation and choice of methods and media he uses in his work. There is a problem of determining, diagnosing and predicting adequate work (learning) systems that - regardless of the teaching technology - will give maximum cognitive effects in relation to the formation of the personality of the participants of education and teaching.

In the field of learning and education, Skinner's theory of reinforcement in the last twenty years has been quite well received

not only in the psychology of learning, but also in pedagogical psychology and didactics. It is to Skinner's credit that, with his scientific research, he enabled the wider application of machines in learning, and thus the creation of a new, in the true sense of the word, a revolution in teaching.

In his work "Scientific development of teaching", Skliher presents his views on contemporary trends in the development of learning and teaching. Drawing a distance between the organism's response to external stimuli and operational behavior that is proportional to reinforcement, he reduces human learning to an activity that is tied to a predetermined goal.

Presenting three basic concepts, which he calls metaphors, in human behavior, he critically looks at the numerous shortcomings and vagueness in the explanations of the attempts and application of many experiments with animals to come up with certain theories of human behavior. These are: (1) learning in action, where problem solving is emphasized; (2) learning from experience to a situation where solutions appear that cannot independently, or in combination with each other, give a more complete conception of human learning, because the problem should be focused on the analysis of changes that occur precisely at the moment when a person learns something; (3) positive and negative reinforcers - reinforcements that are often very few or almost none in the classroom.

Skinner's criticism of the traditional conception of learning boils down to: Skinner directs the harshest criticism to the traditional school and the lack, or rather very weak reinforcement, that is, confirmation during learning, which most often comes only from educators.

Overcoming difficulties in traditional teaching and learning is possible with the well-designed application of experiments

that have been carried out to date and that can be applied under certain conditions in our educational work (in healthcare). The reinforcement of educators in classical teaching was really weak and the education candidate did not have the opportunity to correct his work. In the new conditions, where technique and technology are applied in classes, the educator will have significantly more opportunities to inform the student (that is, to support him) about the course of the immediate learning process and thus enable him to work better and progress faster.

For us, Skinner's understanding that in teaching and learning is not of first-class importance is not reinforcement, but modeling of the continuum of procedures that achieve the adoption of some content, because the subject is affected by very subtle details that escape the deliberate control of the human organism. Therefore, the experimenter must be replaced, so to speak, by mechanical or electrical devices, but not at all costs and not in all situations, because the permanent connection of the educator in the learning process with the young healthcare worker and an emotionally positive attitude towards them in certain work situations is irreplaceable and is of inestimable value. What we want to highlight for teaching technology is the aspiration to maximally eliminate the aversive situation in the traditional education methodology created by the educator's reaction (evaluation) of the candidate's problem solving and learning itself.

CONCLUSION

Numerous studies show that some solutions must be quickly applied in the professional development and education of young health workers, but a significant part of these studies will require experimental checks and careful measurements of some results that will not be possible in our cultural environment and in our socio-political

aspirations. to catch That is why care must be taken about the models and structure of the training of current and future more experienced doctors who could be involved in the modern trends of scientifically proven innovations in health education. This obliges us to the need to introduce significantly more intensive and extensive research and teaching-educational work, without which it is not possible to move forward in solving many problems.

Discoveries that in the last twenty years have brought epochal changes in biology, genetics, anthropology and medicine impose serious reasons for revising some pedagogical and psychological settings in healthcare. There are, first of all, unimagined possibilities of scientific knowledge about the biochemical and genetic structures of man and their influence on the development of certain personality traits, as well as scientific assumptions that the structural specificities of the cerebral cortex are so individual that they must be ignored as soon as possible or, better said, reject some long-standing tradition and that we must make very bold and radical moves in terms of respecting and tolerating human authenticity and individuality, and not be slaves to the statistical inexorability of the "mass" which is based on the construction of the "average man" (average health worker). Thanks to a lot of scientific knowledge in the field of tangential sciences with pedagogy and psychology, management, as well as the attempts of various learning theories to introduce more new solutions into health and educational activities, the traditional system of organizing education and professional development and learning is facing one of the biggest change in its very long history. The acceleration of these changes was conditioned by the increasing pressure of technical and technological innovations, which, with their diverse applications, not only in medicine but also in education in general, made great changes in relation to the sources, transfer and

consumption of knowledge, which until now was reserved only for teachers. and represented his indisputable function. Those jumps in the processes of changed conditions of education and educational relations drastically disrupted and seriously threatened the traditional understanding of the function of the manager in healthcare, his exclusion and suppression from some processes in which he was a key and irreplaceable factor.

Learning theories and their application in the teaching of medicine imply not only changes in relation to the organization and contents of work, but also a thorough change in the education of leaders, managers, who will be able to professionally organize teaching adapted to the new requirements of medicine. This means changing the system of education and permanent training of managers as managers with the aim of assigning the manager an adequate function in the new conditions that cannot be replaced by any technical-technological medium.

The complexity of the issue of learning and professional development, which is treated differently in theories, then the changes that in modern technique and technology of medicine impose the need for new searches in the activities of a healthcare manager who leaves part of his former activities to modern media, comes to a new situation that requires him to change his activity . The constellation of factors that determine the change in the manager's function in innovation significantly determines the dimension of the manager's influence on the young generation. Thus, the problem of the function of leaders, managers in the health sector in the new conditions must be studied much more intensively, because the fundamental role of the manager does not change in the health process, but it appears in the changed conditions that bring innovations, with a much more specific activity as an educator to young people.