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The need to use the principles and basics of medical education to improve the quality of education in universities of medical science

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ABSTRACT

Medical education, supported by philosophical foundations and diverse approaches, bridges care, prevention, treatment, and improvement, encompassing both basic and clinical sciences. It is essential for specialists to leverage this field to address educational gaps and enhance teaching and learning. While experts excel in their domains, success in education requires understanding the principles of teaching, learning, and evaluation. Medical education, integrating key elements such as curriculum design, technology, leadership, and social accountability, has the potential to revolutionize health science education. Policymakers and managers must prioritize this field to advance both education and healthcare outcomes.

Keywords: medical education, healthcare outcomes, clinical sciences

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INTRODUCTION

The field of health and treatment is considered one of the key sectors in the body of any country and is in a way responsible for ensuring the safety of the body and mind of the society. Within this huge complex, there are various fields of basic and clinical sciences, each of which plays a role in completing the health puzzle, according to their expertise and field. What connects these sciences and is considered their common thread is called "education". Education, which according to experts and owners, can be called the missing link of the health education system [1]. A few decades have not passed since the emergence of the field of medical education, a young but very vital and effective field that can make the health and treatment field undergo a fundamental paradigm shift at the macro level. What is considered to be the birth of this field, regardless of the effects and consequences that have been revealed in the form of documents that can be mentioned in the short term, and is a strong proof of the importance of this field and its implementation in upstream documents and macro-level policies, the existence of evidence It is solid and well-argued, which shows the application of the implementation of this discipline well and shows hopes in solving the challenges of teaching and learning in basic and clinical sciences [2-6].

Medical science education is one of the most important pillars of comprehensive national development, with a direct impact on the health of the society, and medical sciences universities, as the guardians of this important matter, play an incomparable role in the lives of the general public. Therefore, investing in educational research in the field of health is doubly important. With this idea, the national conference of medical science education is held annually by medical education experts. Conventional and popular educations in the field of health and treatment will no longer have the necessary effectiveness and efficiency unless they benefit from medical education, in other words, it is necessary for the growing and growing development of the medical science education system, rather than changes and transformations in macro-structural dimensions. Management, and policies have been made and emphasis should be placed on the immediate and future needs of the society, and the desired programs should be monitored regularly in order to improve quality. Although, for the acceptance and use of the field of medical education, basic and clinical science specialists may excuse obstacles and challenges such as not knowing the necessity or lack of time, etc., but valid scientific documents and evidence confirm the

acceptability of medical education every day and they respect. The quality of medical science education is one of the bases for improving the quality of health care. The education of medical sciences has witnessed development in various sectors since about a century ago, which was taken into more serious consideration with Abraham Flexner's report. It has been almost three decades since the first national conference on medical science education was held in 1996 with the focus on introducing and explaining the role and place of education science in providing, maintaining and improving education and health. This conference is held annually since 2008. The Ministry of Health, Treatment and Medical Education, as the main organizer and trustee of this conference at the national level, and by inviting prominent professors of medical education at the international level, annually in the middle of May, has a serious interest in promoting and developing the basics of medical education. This conference has a permanent secretariat which is located in the study and development center of medical education of the Ministry [7].

The ultimate goal of this conference is to increase the quality of education in medical sciences to improve care and treatment services in this field. The presenters and founders of the conference emphasize one of the most important and up-to-date axes in the health education system every year.

RESEARCH METHOD

In this speech, researchers have examined the last 4 sessions of this conference (Table 1).

Tab. 1. Researchers have examined the last 4 sessions of this conference

The Period	Centrality
22	Transformation and innovation in medical science education: mission orientation and differentiation of academic mission in medical sciences universities
23	Preservation and promotion of medical science education in the transition from the corona era
24	Responsive Education, Transcendent University
25	Medical science education: from the classroom to the field
Conference events include:	Booths (each mega-region has a booth to present educational achievements), working breakfast, consultation clinic, debate, presentation of experiences, innovative ideas, educational processes of Shahid Motahari, poster, short speech, symposium, theses and workshops

In this study, by carefully examining these events, the extract and the final output of these 4 courses are expressed in the form of practical tips and in several sections (Figure 1).

Emphasis on educational leadership instead of educational management

Various studies have shown the effectiveness of educational leadership compared to educational management). There are clear differences between these two roles, including differences in perspectives, creating opportunities, being supportive, emphasizing teamwork, accepting changes, motivating, etc.

Responsive education (social accountability)

Emphasis on the category of responsive education, compiling curriculum contents based on the needs of society, using the needs assessment of treatment assistants to allocate the burden of diseases and paying attention to them in the content of the curriculum, paying attention to the needs of the beneficiaries, etc.

The importance of the lesson plan

Paying attention to the role of the hidden curriculum, using Bloom's taxonomy and high cognitive goals, emphasizing the goals of the motivational field, formulating behavioral goals based on being smart, behavioral goals should have performance criteria, conditions and relevant behavioral verbs, using Blueprint table, considering longitudinal theme for high volume courses.

Use of Instructional design

Using educational design models in the teaching and learning process, such as Ganey and Briggs models, Edgar Dill cone, Dick and Curry model, David Merrill model, Keller's motivational model, ASSURE, Raygluth model, etc.

Use of new teaching approaches

Many studies have considered the use of new teaching methods in medical science education as more effective than traditional methods. Using models and methods such as spices model, snap model, relying on role model, tbl, cbl, flipped classroom methods, blended learning, etc. can help the effectiveness of education.

The use of new technologies in teaching and learning

The use of gamification, simulation, TPACK model, the role of artificial intelligence in education, VR, AR, etc., according to the learners of generation, it is necessary that teachers use these technologies Do not promote teaching and learning.

Use of modern evaluation methods

Based on modern teaching methods and considering the very important importance of evaluation in the education process, it is necessary to use modern evaluation methods such as workplace-based tests, Miller pyramid, competency-based tests, portfolio, log Book be used.

Revision of curriculum

Based on the speed of changes in the field of medical science, it is necessary to revise curricula. Curricula are living organisms that need to be given serious attention, using different models such as Kern's model, Harden's ten steps, Klein's model, etc. can help a lot to improve and strengthen curricula.

Emphasis on competencies and capabilities

Using the University of Birmingham model, paying attention to professional ethics, using the model of Singla and colleagues in developing competencies, Maastricht's seven steps, etc., are of great help in developing competencies.

Emphasis on scholarship

Considering the very important role of educational processes in universities, the use of Glassic criteria and Boyer's quality criteria is helpful for carrying out effective processes.

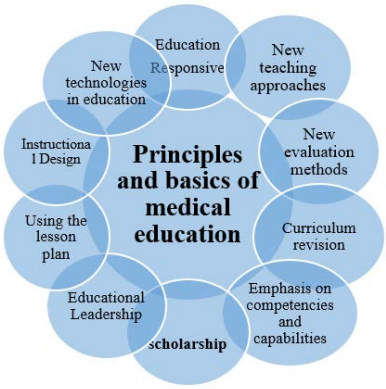

Fig. 1. The form of practical tips and in several sections

CONCLUSION

Medical education with a strong philosophical support and having diverse approaches from care and prevention to treatment and improvement is included and has opened its wings like a huge umbrella over the basic and bedside sciences. It is necessary that in the light of this useful and practical field, basic and clinical science specialists make maximum use of it, make up for their educational deficiencies and get inspiration from this field. Even though experts in basic and clinical sciences may have a lot to say in their field of expertise, this does not mean that they have been successful in teaching and learning. The field of medical education as a miracle drug with a high percentage of confidence can heal the pains caused by education and learning and illuminate the path of the relevant professionals in their field of work. This field takes into consideration the fundamental principles of teaching and learning and taking into account all the important and basic factors (even though partial) such as (teacher/doctor, student, patient, hospital and university environment, society, the principles of psychology of learning and education, curricula Curriculum, educational design, educational technology, educational leadership and management, assessment principles, evaluation and accreditation, social accountability, research in education, millennial learners, modern learning, emphasis on the fields of knowledge, attitude and skills in all sectors, education strategies and learning and many others) strives to lead the world of science and health one final step forward. What is obvious is that health policy makers and managers should pay more attention to this field and make it current in educational and medical centers. For sure, what is certain is that in the matter of macro-policies and upstream documents and management areas, one should have a special look at this discipline and inject its principles and implementation foundations into the heart of basic and clinical sciences. We hope to create a better tomorrow by relying on this field.

COMPETING INTERESTS

Authors declare no conflict of interests.

ETHICAL APPROVAL

Not applicable.

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