

THE CONCEPT OF EMOTIONAL INTELLIGENCE IN THE CONTEXT OF MEDICAL STUDENT TRAINING**Lembryk I.S., Merena R.I., Dutchuk O.V., Shatynska T.V., Zhyliak O.V., Tsytsiura O.O.***Ivano-Frankivsk National Medical University, Ivano-Frankivsk, Ukraine***Key words:** *emotional intelligence, medical student, learning.**Bukovinian Medical Herald. 2026. V. 30, № 1 (117). P. 151-156.***DOI:** 10.24061/2413-0737.30.1.117.2026.23**E-mail:** *tshatynska@ifnmu.edu.ua*

Resume. *In today's context of adaptation of the educational process to the harsh conditions of martial law, globalisation, informatisation and the rapid advancement of scientific and technological progress, the development of so-called 'soft skills' is of great importance. This includes emotional intelligence, which is the ability of an individual to recognise, understand and manage their own emotions, thoughts, feelings, motivation to act, as well as to empathise with others. This also includes the capacity of a person to manage their own emotional states in crisis situations (war, natural disaster, complicated life circumstances or professional challenges), the ability to work in a team (developing and solving a clinical scenario, working in wards with complex patients, etc.) Emotional intelligence is crucial for professionals to swiftly adapt to challenging circumstances, flexibly adjust work schedules, and establish effective teamwork. However, despite its significance, there is currently insufficient data on the effective integration of emotional intelligence into the educational process in higher medical institutions.*

Aim. *To analyse the concept of 'emotional intelligence' in the context of the educational process in higher medical education institutions based on the literature sources and personal observations.*

Materials and methods. *To achieve this goal, we used data from Google Scholar and PubMed search engines. At the second stage of the study, we interviewed 434 students of the 4th-6th year of Ivano-Frankivsk National Medical University to assess their knowledge and perceptions of emotional intelligence. The survey consisted of 10 short, anonymous questions administered via Google Forms.*

Results. *According to the survey results, 74.4% of students consciously approach the survey processes in an attempt to manage their emotional state. And 87.7% of students pay attention to the emotions of others in the learning process, which indicates a high level of emotional intelligence and adequate interaction. Instead, 19.1% of respondents cannot indicate the origin of these emotions or clearly identify them. About 10% of students are unable to control their own emotions in the learning process. In a stressful situation, 31.8% of respondents believe that it is more difficult for them to control their emotions, which has significant consequences for mental health.*

Conclusions. *The findings suggest a high level of emotional intelligence among students at all stages of undergraduate medical training. However, stress significantly impacts the mental health of 31.8% of students.*

ПОНЯТТЯ ЕМОЦІЙНОГО ІНТЕЛЕКТУ В КОНТЕКСТІ ПІДГОТОВКИ СТУДЕНТА-МЕДИКА**Лембрик І.С., Мерена Р.І., Дутчук О.В., Шатинська Т.В., Жиляк О.В., Цицюра О.О.****Ключові слова:** *емоційний інтелект, студент-медик, навчання.**Буковинський медичний вісник. 2026. Т. 30, № 1 (117). С. 151-156.*

Резюме. *У сучасних умовах адаптації освітнього процесу до жорстких умов воєнного стану, глобалізації, інформатизації та розвитку науково-технічного прогресу важливого значення набуває розвиток у здобувача освіти, так званих, м'яких гнучких навичок або "soft skills". Ідеться, у тому числі, про емоційний інтелект, як здатність індивіда усвідомлювати, розуміти та керувати власними емоціями, думками, переживаннями, мотивацією до дій, співпереживати оточуючим. Сюди також відносять вміння особи керувати власними емоційними станами в кризових умовах (війна, стихійне лихо, складна життєва чи критична професійна ситуація), здатність працювати у команді (розробка та розв'язок клінічного сценарію, робота у відділеннях зі складними хворими тощо). Саме емоційний інтелект стає запорукою швидкої переорієнтації фахівця*

у складних обставинах, спонукає до гнучкого переформатування робочих графіків, побудови ефективної командної роботи. Водночас, на сьогодні знаходимо недостатньо даних щодо ефективної імплементації знань про емоційний інтелект в освітній процес у закладах вищої медичної освіти.

Мета дослідження: проаналізувати поняття «емоційний інтелект» у контексті освітнього процесу в закладах вищої медичної освіти за даними літератури та власних спостережень.

Матеріал і методи. Для реалізації мети використано дані пошукових систем Google Scholar, PubMed. На другому етапі дослідження ми опитали 434 студентів 4-6-х курсів Івано-Франківського національного медичного університету, щоб оцінити їхні знання та сприйняття емоційного інтелекту. Опитування складалося з 10 коротких анонімних запитань, які задавалися через Google Forms.

Результати. За результатами опитування 74,4% студентів усвідомлено підходять до процесів опитування, намагаючись керувати свій емоційний стан. А 87,7% здобувачів освіти в процесі навчання звертають увагу на емоції інших, що свідчить про високий рівень емоційного інтелекту та адекватну взаємодію. Натомість, 19,1% опитаних не може вказати походження цих емоцій або чітко їх ідентифікувати. Біля 10% студентів не здатні до контролю власних емоцій у процесі навчання. В умовах стресової ситуації 31,8% респондентів вважають, що їм важче контролювати свої емоції, а це має суттєві наслідки для ментального здоров'я.

Висновки. Можемо припустити наявність високого рівня емоційного інтелекту на всіх етапах додипломної підготовки. Однак в умовах стресу ідеться про суттєве погіршення ментального здоров'я у 31,8% студентів.

Introduction. At the current stage of higher medical education reform, emphasis is placed on the holistic development of the personality of the professor and the student. Among the six essential "soft skills" for future doctors, as outlined by the Accreditation Council for Graduate Medical Education (ACGME) in the USA and the Working Group on Modernization of Higher Education (WG-MHE) in Europe, emotional intelligence holds a significant position within the social domain. Despite its importance, broader integration of these competencies into curricula remains limited in developing countries.[1].

Aim. To analyse the concept of 'emotional intelligence' in the context of the educational process in higher medical education institutions based on the literature sources and personal observations.

Materials and methods. A search was conducted in the scientific metric systems PubMed and Google Scholar using the search terms 'emotional intelligence' and 'medical students' from 2019 to 2024. We reviewed 1323 reports in the scientific literature related to the concept of emotional intelligence and its application in higher medical school as a tool for influencing consciousness, empathy, building communicative relationships and social interaction between all participants within medical education and clinical practice.

At the second stage of the study, we interviewed 434 students of the 4th-6th year of Ivano-Frankivsk National Medical University to assess their knowledge and perceptions of emotional intelligence. The survey consisted of 10 short, anonymous questions administered via Google Forms.

Results. The phenomenon of emotional intelligence has been known in scientific circles since 1983, when the famous psychologist Howard Gardner first described its

manifestations in his scientific work "Frames of Mind". The scientist suggested the existence of seven subtypes of human intelligence: logical and mathematical, musical, spatial, verbal, kinesthetic and emotional intelligence, which he further divided into intrapersonal and interpersonal subtypes [2].

The intrapersonal subtype of emotional intelligence is based on the ability of an individual to adequately perceive themselves, consciously analyse and identify their own feelings, as well as to be able to manage them. It also involves self-determination and motivation to achieve success in the professional field. On the other hand, the interpersonal subtype of emotional intelligence is called social intelligence, that is the ability of a person to interact with others in various situations [3-6].

Later, such researchers of this psychological phenomenon as J. Meyer and P. Selloway, expanded and generalised the definition of emotional intelligence by introducing 5 components into its composition.. These are self-knowledge, self-regulation, including emotional awareness, emotion management, self-motivation, empathy, social skills, etc.

The well-known Israeli scientist R. Bar-On refined 5 components of emotional intelligence: 1) human self-knowledge is more related to self-confidence, self-respect, and personal independence; 2) interpersonal communication promotes higher social responsibility and empathy; 3) flexibility and lability of reaction contribute to constructive solutions to problems and critical situations; 4) control over impulsive behaviour and actions motivates and increases stress resistance; 5) optimism and a positive outlook improve the quality of life, etc.

According to the psychologist, it is a high level of emotional intelligence that directly correlates with life

Problems of higher medical education

experience and/or age. However, further research in this area has proven to be rather controversial.

Issues related to emotional intelligence are still in the focus of interest of professionals and researchers of this topic. It is noteworthy that most scientists still provide different definitions of the concept of emotional intelligence and emphasise the differences in its interpretation [7-9]. The only thing that all experts agree on is the expediency of studying and wider application of this phenomenon in medicine. After all, it is healthcare professionals who are the first to fall under the negative influence of stress, suffer from emotional burnout, general exhaustion, anxiety, depression, psychosis and neurosis, especially during war. Therefore, the acquisition of such necessary flexible skills as self-regulation, empathy, self-knowledge and self-awareness, including the ability to work effectively in a team, are basic and necessary in our difficult times.

In general, emotional intelligence in the context of higher medical education is considered from two perspectives. Firstly, it should be one of the criteria for selecting applicants for admission to medical school. Secondly, emotional intelligence is becoming a measure of academic performance and effectiveness of educational activities, as it directly correlates with cognitive intelligence [2, 10, 15]. It should be noted that there are still disputes among scientists about the validity and reliability of interpersonal communication and empathy skills as significant in the interpretation of academic performance of a student [11-14]. Some experts argued that emotional intelligence is only effective as a component of cognitive intelligence and emotional competence. Other researchers, in particular Hcu et al. (2024), argued that the implementation of the principles of emotional intelligence in the working curricula in higher medical education institutions would contribute to more effective and comprehensive training of future doctors.

One of the components of emotional intelligence that has significant practical importance in higher medical education is social and emotional learning (SEL). It is known to focus on managing emotions, stress, empathy, and the development of social and emotional skills. Medical students can acquire them by observing, interacting with and imitating others. The inclusion of SEL components in the educational process ensures the sustainable development of skills and abilities necessary to form positive relationships with patients and cope with the emotional component of medical work. SEL consists of six domains, namely cognitive, emotional, social, value, perspective and identity domains. These six domains are closely related to the six core competencies that every doctor should possess (Accreditation Council for Graduate Medical Education (ACGME)), which has already been mentioned above. In our opinion, they should be more actively introduced into the educational programmes at medical schools, at the pre- and postgraduate stages.

In scientific sources of recent years, one can come across studies of the relationship between the level of emotional intelligence and the academic performance of medical students and interns. Separate observations are also being made on effective interaction in the "doctor-

patient-relatives of the patient" relationship from the standpoint of empathy, communication competence, cognitive intelligence, etc. However, there are still very few large prospective studies on the topic with representative samples of respondents.

In one of these scientific reports, the researchers used questionnaires that were small in content and volume, containing simple questions (28%), and analysed 39 abstracts on the topic of the study. According to the results of the questionnaire, a satisfactory state of mental health and well-being among participants in the educational process was found most often (67%). 20 abstracts reported a significantly lower level of emotional burnout, as well as a significant reduction in anxiety, stress, and depression in individuals whose emotional intelligence was initially high enough. Emotional intelligence has also been linked to several clinical effectiveness criteria, such as positive patient compliance with treatment outcomes and communication with the doctor. Such doctors, according to the researchers, had a higher level of professional training and showed a higher level of stress resistance.

According to the survey, we obtained the following results among students of the 4th-6th year of Ivano-Frankivsk National Medical University.

Taking into account the survey data acquired from students of 4-6 years of medical faculty, it was found that 74.4% of respondents are often aware of the emotions they experience during their studies and can clearly articulate them. Only 2% of the surveyed students can never consciously describe the emotions they experience during the entire period of study (Fig. 1).

When communicating in the learning process, 87.7% of students noted that they often notice the emotions of other people, which may indicate a high level of emotional intelligence, which in turn has a positive effect on the interaction between people. However, 1.6% of respondents rarely pay attention to the reactions and emotions of other people when communicating (Fig. 2).

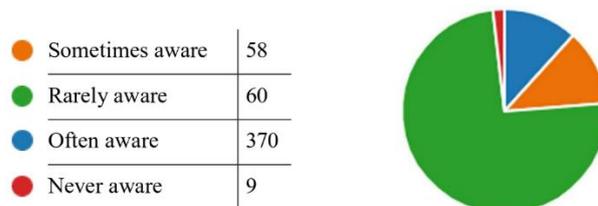


Fig. 1. Assessment of emotions experienced by students in the learning process, n=434

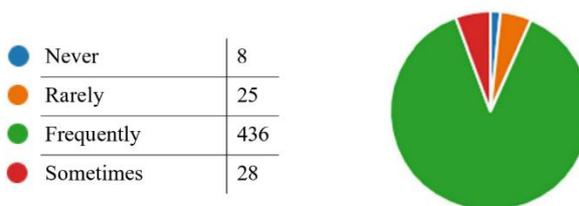


Fig. 2. Assessing the emotions of others when communicating in the learning process, n=434

Проблеми вищої медичної освіти

The majority of students can almost always describe their own emotions when communicating with people and clearly identify the origin of these emotions, their causes and try to analyse the situations in which they arise. However, a significant number (19.1%) can only sometimes determine the origin of these emotions or sometimes identify them - 10.4% (Fig. 3).

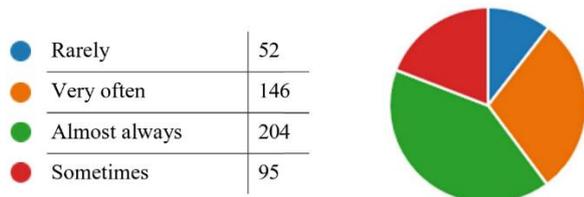


Fig. 3. Assessment of emotions in communication with other people, and the ability to identify the origin of these emotions and their causes, n=434

Oftentimes, in the process of communication between groupmates or professors, conflict situations occur, during which various kinds of emotions arise that are difficult to control. However, 52.7% of respondents say that they are able to control their emotions in a conflict, which helps them not to disrupt the learning process and improves their relationships with each other. Only about 10% of students are unable to control their emotions, which may lead to a deepening of the conflict and involvement of others to solve the problem (Fig. 4).

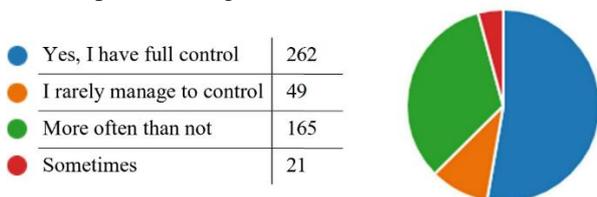


Fig. 4. Evaluation of emotions in case of conflicts with groupmates or professors in the learning process, and the ability to control one's emotions, n=434

According to this survey, it can be established that students have a fairly high level of emotional intelligence, as 46.8% of respondents often understand the emotions of other people in the process of communication, which has a positive impact on the entire learning process (Fig. 5).

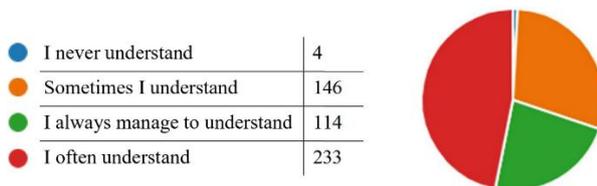


Fig. 5. Assessment of understanding other people's emotions in the process of communication, n=434

In the survey, almost the same number of students indicated that when communicating with other people, they either almost always express their feelings or emotions in full (18.9%) or cannot express their feelings at all (16.5%) (Fig. 6).

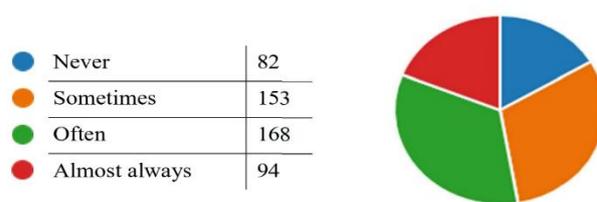


Fig. 6. Assessment of emotions when communicating with other people and the ability to express your feelings or emotions in full, n=434

Given that in the modern world there are many stressful situations

that cause various types of emotions, only 38% of students said they could fully control their emotions and 31.8%, which is a significant proportion of respondents, believe that it is difficult for them to control their emotions in stressful situations, which often has negative consequences and leads to mental health deterioration (Fig. 7).

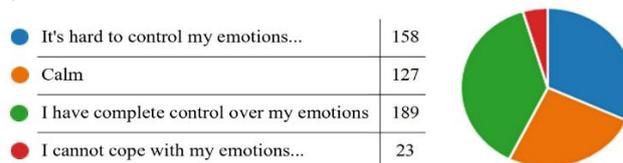


Fig. 7. Assessment of the reaction to stressful situations that arise in life, n=434

Quite often, respondents report that they sometimes manage to help colleagues cope with their emotions in critical situations or conflicts, which helps to preserve the emotional state of people around them. However, 5% of the respondents did not note any impact on the emotional state of their colleagues (Fig. 8)

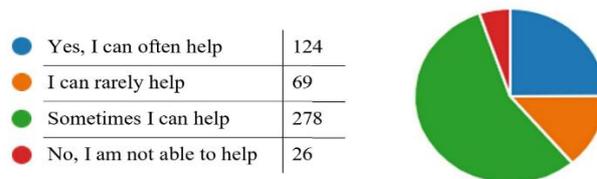


Fig. 8. Assessing the emotions of colleagues in stressful situations and being able to help them deal with their emotions, n=434

According to the survey results, students usually hide (49.7%) their reaction when negative emotions arise during communication, a significant number (25.2%) of them can clearly control their emotions, but a large proportion (8.6%) indicate that they cannot control them at all or are simply distracted from analysing their own emotions and feelings (16.5%) (Fig. 9).

If we evaluate the data from the student survey, a conclusion can be made that the majority of the surveyed students are empathic, depending on the situation, which is an important trait for the future profession of a doctor. However, 9.4% of respondents do not consider themselves empathic at all, which may create obstacles in communication with colleagues and patients in the future (Fig. 10).

An anonymous survey among medical students allowed us to assess the importance of emotions at each stage of a doctor's formation.

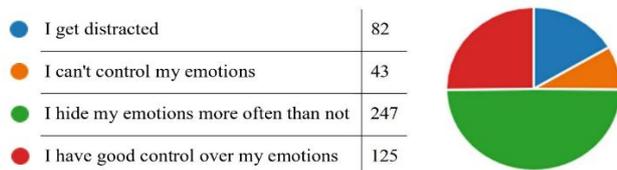


Fig. 9. Assessment of negative emotions in communication and reaction to emotions you experience, n=434

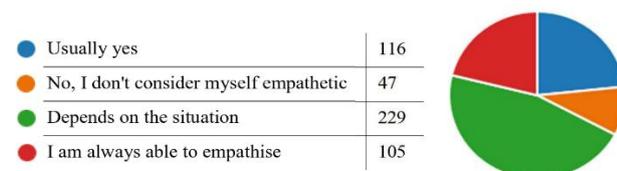


Fig. 10. Assessment of the presence of empathy in the surveyed students, n=434

Conclusions. To summarise all of the above, it can be assumed that a high level of emotional intelligence at all stages of undergraduate and postgraduate training will allow future doctors to better cope with complex life and professional challenges, critical or urgent situations in practice. Despite numerous publications in the national and foreign literature, there are many contradictory interpretations of approaches to emotional intelligence, and the tools for measuring it are contradictory, not always valid and widely used in practice.

The basic principles of emotional intelligence are part of social and emotional learning, and some of its elements are now being actively introduced into disciplines directly or indirectly related to mental health.

Prospects for further research. Proper studies of emotional intelligence due to modern questionnaires.

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Проблеми вищої медичної освіти

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