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THE NECESSITY STUDY OF EMERGENCIES IN DENTISTRY BY STUDENTS OF DENTAL FACULTIES

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НЕОБХІДНІСТЬ ВИВЧЕННЯ СТУДЕНТАМИ СТОМАТОЛОГІЧНОГО ФАКУЛЬТЕТУ ОСНОВ НАДАННЯ ЕКСТРЕНОЇ МЕДИЧНОЇ ДОПОМОГИ ПРИ НЕВІДКЛАДНИХ СТАНАХ У ПРАКТИЦІ ЛІКАРЯ-СТОМАТОЛОГА

The aim of the work – to analyze a current state of training students-stomatologists on the issues of emergencies in practice of a dentist and note the main directions of its improvement.

The main body. The article shows that an important element of the educational and qualification characteristics of a dentist is the ability to provide emergency medical care in typical emergency situations that are possible in his medical practice. In the educational and qualification characteristics of the specialist in the specialty 7.110106 Stomatology, the areas of training 1101 Medicine, based on production functions, typical tasks of the activity and skills that a graduate of a higher medical institution should have in this specialty, is indicated: diagnosis of emergency conditions, emergency medical care.

It is advisable to organize training in a special cabinet of simulation training using adequate means (manikins and simulators). Dummy for basic resuscitation measures; mannequin of the respiratory tract, manikin for conic puncture and conicotomy; mannequin hand for catheterization of veins nebulizer; consumables (gloves, masks, transfusion systems, syringes, medicines, etc.).

Conclusions. The newest method of simulation training in dentistry provides for the development of skills and practical applications of acquired theoretical knowledge by individual student performance of the tasks of determining the overall tactics, diagnosis and treatment of simulated patients in the simulated situation of an emergency condition. The situation of an emergency condition is simulated – this is a scenario in which a specific emergency state is imitated by a specific person (a simulator) or a dummy using additional technical means.

The study of emergency conditions by students of the stomatological faculty needs to improve and introduce the newest methods of simulation training in dentistry.

Key words: the educational and qualification characteristics; emergencies; dentistry.

Мета роботи – проаналізувати існуючий стан підготовки студентів-стоматологів з питань невідкладних станів у практиці лікаря-стоматолога і намітити основні напрямки його вдосконалення.

Основна частина. У статті показано, що важливим елементом освітньо-кваліфікаційної характеристики лікаря-стоматолога є вміння надавати екстрену медичну допомогу при типових невідкладних станах, які можливі в його медичній практиці. В Освітньо-кваліфікаційній характеристиці спеціаліста за спеціальністю 7.110106 “Стоматологія” напряму підготовки 1101 “Медицина”, виходячи з виробничих функцій, типових задач діяльності та умінь, якими повинен володіти випускник вищого медичного закладу за зазначеним фахом, вказано: діагностування невідкладних станів, визначення тактики надання екстреної медичної допомоги, надання екстреної медичної допомоги.

Підготовку доцільно організувати у спеціальному кабінеті симуляційного навчання із використанням адекватних засобів (манекенів і тренажерів), таких, як: манекен для базових реанімаційних заходів; манекен дихальних шляхів; манекен для конікопункції і конікотомії; манекен руки для катетеризації вен; небулайзер; розхідні матеріали (рукавичка, маски, системи для переливання, шприци, медикаменти тощо).

Висновки. Новітня методика симуляційного навчання в стоматології передбачає формування вмінь і навичок практичного застосування набутих теоретичних знань шляхом індивідуального виконання студентом завдань визначення загальної тактики, діагностики та лікування симульованих пацієнтів у змодельованій ситуації невідкладного стану. Змодельована ситуація невідкладного стану – це сценарій, при якому на конкретній особі (симулянт) чи манекені за допомогою додаткових технічних засобів імітується певний невідкладний стан.

Питання вивчення невідкладних станів студентами стоматологічного факультету необхідно вдосконалити та запровадити новітні методи симуляційного навчання в стоматології.

Ключові слова: освітньо-кваліфікаційна характеристика; невідкладні стани; стоматологія.

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Introduction. In modern dental practice, the emergence of urgent conditions is a fairly common and predictable phenomenon. This is due to various specific factors of outpatient dental care. It is necessary to pay attention to the fact that this is a massive type of outpatient medical care, is on the second place after general therapy, and, as a rule, time for comprehensive examination of the patient is not always enough. There is a high percentage of patients with concomitant somatic pathology.

Dental intervention in many patients is carried out with significant psycho-emotional stress associated with a long-term pain syndrome, which causes a decrease in the threshold of perception of irritations and increases the body's stress response to the pathological level. A significant part of today's patients have negative emotional memories of visiting the dental office in the past. Among other things, we should not forget about the possibility of toxic effects of anesthetics, which can cause serious complications, life-threatening patients [1].

Every dentist should be able to recognize urgent conditions, meet more often and be able to provide first medical help. However, in some cases, the dentist is unable to help the patient. This is due to the lack of practical and moral training of a specialist in the emergence of an emergency situation. Most often, a dentist, once faced with this problem, feeling panic and a personal inability to control the situation, refuses to perform anesthesia or other interventions, transferring them to another person, or changing specialization.

All this can be avoided by thoroughly studying the most common emergency conditions, their clinic, diagnosis and first aid in simulated situations. Only when the doctor gradually knows each step in the occurrence of this or that complication, then only he can calmly and confidently receive patients.

According to the existing regulatory documents in the office of a dentist, there should be a medical styling with a set of medications for urgent correction of a number of urgent conditions. The dentist is subject to all requirements as a medical worker for the provision of emergency medical care, fixed in the relevant educational and qualifying characteristics [1]. All this makes it necessary to improve the training of a dentist in emergency situations, which are possible in conditions, both individual reception of the patient, and in a polyclinic or a hospital.

The aim of the work – to analyze the current state of training of dental students on urgent problems in the practice of a dentist and outline the main directions for its improvement.

The main body. In the educational and qualification characteristics of the specialist in the specialty

7.110106 Stomatology of the 1101 Medicine training area, proceeding from the production functions, typical tasks of the activity and skills that a graduate of a higher medical institution should have in this specialty [7]:

– diagnosis of emergency conditions: in all circumstances (at home, on the street, in a medical institution, etc.), in conditions of lack of information and limited time, using standard examination techniques and data of possible history, knowledge of the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision and assessing the condition of a person to diagnose;

– determine the tactics of providing emergency medical care in any circumstances, using knowledge of the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision, on the basis of the diagnosis of an emergency condition in a limited time, using standard schemes to determine the tactics of emergency medical assistance;

– provision of emergency medical care in any circumstances, using knowledge of the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision, on the basis of a diagnosis of an emergency condition in conditions of limited time in accordance with a certain tactic, using standard schemes, to provide emergency medical help.

In the corresponding annex to the Education and Qualification Characteristics, a list of urgent conditions is listed, which the graduate of the dental faculty should be able to treat: asphyxia, hypertensive crisis, acute respiratory failure, acute poisoning, electrical injury, external bleeding, circulatory and respiratory arrest, coma, laryngeal edema, Quincke edema, fainting, hypothermia, drowning, shocks [2].

In accordance with the qualification requirements specified in the Handbook of Qualification Characteristics of the Occupations of Health Care Professionals, approved by Order No. 117 of the Ministry of Health of 29.03.2002, the task and duties of a dentist include the provision of emergency dental care not only for acute inflammatory processes, traumatic injuries, bleeding, as well as with acute coronary syndrome, heart rhythm disturbances, anaphylactic shock, acute cardiac and respiratory failure, hypo these, laryngeal edema, hypertensive syndrome, collapse, sudden cardiac death, and the like. It should be remembered that one third of patients who reach a heart attack die before the ambulance arrives [6].

The best results in the treatment of a sharp cessation of blood circulation gives immediate start to resuscitation,

but, if possible, this is best prevented. The cause of many stops of blood circulation during current is ischemic heart disease. Therefore, it is important that the doctor be able to recognize and assess the patient's condition and also begin immediate treatment that will reduce the risk of cardiac arrest and patient death on an outpatient visit [5].

Medical care in emergency situations in a safe for the doctor situation should be provided by the doctor always, regardless of whether the doctor is at his workplace, or he is on vacation, or just happened to be in a critical condition under one condition, if the doctor is not with another patient, whose health may worsen during the provision of emergency assistance to the victim in an urgent situation.

“Fundamentals of Ukrainian legislation on health care” in Art. 80 determine that “persons guilty of violating the legislation on health protection bear civil, administrative or criminal liability in accordance with the law”. The Criminal Code of Ukraine in articles 139 and 140 establishes responsibility for the failure to provide medical assistance to a patient with a medical worker and improper medical assistance by a medical worker, respectively. Summarizing the norms of the current legislation, responsibility comes in connection with the failure to provide the necessary medical aid or unreasonable refusal to provide it, without providing valid reasons for the incident (emergency situation) without appropriate reasons, as well as untimely provision of emergency medical care or obstruction in its provision.

Since the issues of studying urgent conditions by students of the dental faculty need to be improved, we suggest introducing the newest methods of simulation training in dentistry.

The newest method of simulation training in dentistry involves the formation of skills and practical applications of acquired theoretical knowledge through individual student performance of the tasks of determining the overall tactics, diagnosis and treatment of simulated patients in the simulated situation of an emergency condition [4].

The situation of an emergency condition is simulated – this is a scenario in which a specific emergency state is imitated by a specific person (a simulator) or a dummy using additional technical means. The task of a student or group of students is to perform a real-time standard algorithm of organizational and diagnostic actions, identify symptoms, analyze and summarize them, state the presence of an emergency condition and apply the appropriate protocol, which should provide emergency medical care. In this case, each student of the training

group should work out the scenario of an emergency situation, provided for in the class plan, either alone or in a group (leader, participant). Scenarios include emergency conditions that may arise in practice at a dentist's appointment. To implement these scenarios, the profile department is staffed with the means for training and visibility (mannequins, models, medical devices, etc.) not below the recommended standard. Conducting practical classes is provided in the training group of no more than 10–12 people.

Proceeding from the above, it becomes clear that at the reception the dentist can perform only a certain accessible element of the protocol on the medicine of urgent conditions in accordance with the typical emergency conditions that most often occur at the reception.

To ensure the educational process, it is necessary to crystallize from the protocols for emergency medical care under these urgent conditions those steps that are mandatory for the dentist to perform before the arrival of the ambulance emergency brigade, to formulate the appropriate lists of medicines and medical products.

The next step is to create a simulation room for training in emergency conditions in the practice of a dentist. The cabinet should include all the attributes of a standard dental office with the following additional equipment:

- a dummy for basic resuscitation measures (for working out the technique of pressing on the chest, artificial ventilation, techniques for ensuring the patency of the upper respiratory tract by tilting the head and extending the lower jaw forward, artificial ventilation of the mouth, mouth-in masks, bag AMB -masks);
- an airway dummy (for testing the technique of ensuring airway patency by the methods of establishing roto- and nasogoroid tubes, Laryngeal masks, Laryngeal tubes, combitube, artificial ventilation of lungs bag AMBU);
- a dummy for conic puncture and conicotomy (for training the technique of ensuring the patency of the upper respiratory tract by the methods of conic puncture and conicotomy);
- a hand dummy for catheterization of veins;
- nebulizer;
- consumables (glove, mask, transfusion system, syringes, medicines, etc.).

In our opinion, it is advisable now to teach students pulse oximetry, express determination of glucose in the blood serum, automatic external defibrillation [3].

Conclusions. An important element of the educational and qualification characteristics of a dentist is the

ability to provide emergency medical care in typical emergency situations that are possible in his medical practice. It is advisable to organize training in a special cabinet of simulation training using adequate means

(manikins and simulators). The study of emergency conditions by students of the stomatological faculty needs to improve and introduce the newest methods of simulation training in dentistry.

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