УДК 796.011.3:616-001

INJURIES DURING PHYSICAL EDUCATION STUDENTS AS A PEDAGOGICAL PROBLEM

Oleg Grebik¹, Petro Savchuk², Aleksandr Valkevich³, Aleksandr Panasyuk⁴, Anatoliy Khomich⁵

Abstract

The article focuses on the prevention of trauma in the process of physical education among students of higher educational institutions. It has been determined that pedagogical conditions for the prevention of accidents are the best means of combating injuries. The preventive focus of Ukrainian health care determines the implementation of a set of preventive measures for the preservation and strengthening of human health. These measures include a large-scale system of measures for the prevention of injuries, in particular in the process of physical education.

To achieve this, you need to properly organize the classes, create the necessary conditions for the proper level of physical perfection. Promoting this will be the acquisition of elementary knowledge and skills that prevent injury, serious damage, and deterioration of health. Before performing physical exercises it is necessary to worry about the proper equipment – clothes, footwear, and protective equipment. All components of the sport form must be fitted in accordance with the figure, clean. The neglect of special means of safety is absolutely inadmissible. Nobody needs a reassessment of their physical perfection, the erroneous belief that insuring means of heavy and uncomfortable that they create the impression of lack of genuine courage provoke students to injuries.

The next rule is qualitative warm-up. And this is not a formality, as it often seems to students. Preparatory exercises, presentation of the structure of the previous movements help to bring the nervous system to the optimum state, activate respiration and blood circulation, «warm up muscles» and «scroll» the joints. Man begins to better orient in space, its movements become more economical, internal organs and systems acquire the ability to withstand the most severe mode of physical and neuro-emotional stress.

Key words: prophylaxis, traumatism, physical education, students.

Олег Гребік, Петро Савчук, Олександр Валькевич, Олександр Панасюк, Анатолій Хомич. Травматизм як педагогічна проблема на заняттях із фізичного виховання студентів. У статті висвітлено аспекти попередження травматизму в процесі фізичного виховання серед студентів вищих навчальних закладів. Зазначено, що педагогічні умови профілактики нещасних випадків - кращий засіб у боротьбі з ушкодженнями. Профілактична спрямованість української охорони здоров'я зумовлює проведення комплексу попереджувальних заходів для збереження й зміцнення здоров'я людини. У ці заходи входить величезна за своїми масштабами система заходів із профілактики травматизму, зокрема в процесі фізичного виховання. Для досягнення цієї мети потрібно правильно організовувати заняття, створювати необхідні умови для забезпечення належного рівня фізичної досконалості. Сприятиме цьому набуття елементарних знань і навичок, які запобігають отриманню травм, важких пошкоджень, погіршенню стану здоров'я. Перед виконанням фізичних вправ варто потурбуватися про відповідну екіпіровку: одяг, взуття, захисне спорядження. Усі складники спортивної форми повинні бути підігнані відповідно до фігури, чистими. Нехтувати спеціальними засобами безпеки абсолютно недопустимо. Нікому не потрібні бравада, переоцінка своєї фізичної вдосконалості, помилкова впевненість у тому, що підстраховуючі засоби важкі та некомфортні, вони створюють враження відсутності справжньої мужності, провокують студентів до травматизму. Наступне правило – якісна розминка. І це не формальність, як часто здається студентам. Підготовчі вправи, уявлення структури попередніх рухів допомагають привести в оптимальний стан нервову систему, активізувати дихання та кровообіг, «розігріти м'язи» й «прокрутити» суглоби. Людина починає краще орієнтуватись у просторі, її рухи стають економнішими, внутрішні органи й системи здобувають властивість витримувати найжорсткіший режим фізичних і нервово-емоційних навантажень.

Ключові слова: профілактика, травматизм, фізичне виховання, студентство.

Олег Гребик, Петр Савчук, Александр Валькевич, Александр Панасюк, Анатолий Хомич. Травматизм как педагогическая проблемма в процессе физического воспитания студентов. В статье отражаются аспекты предупреждения травматизма в процессе физического воспитания среди студентов высших учебных заведений Отмечается, что педагогические условия профилактики несчастных случаев являются лучшим средством в борьбе с повреждениями. Профилактическая направленность украинского

¹ Ph. D. in Pedagogical Sciences. Lutsk National Technical University, Lutsk, Ukraine

² Doctor of Science in Engineering, Professor. Lutsk National Technical University, Lutsk, Ukraine

³ Ph. D. in Pedagogical Sciences, Associate Professor. Lesya Ukrainka Eastern European National University, Lutsk, Ukraine

⁴ Ph. D. in Pedagogical Sciences, Associate Professor. Lutsk National Technical University, Lutsk, Ukraine

⁵ Ph. D. in Pedagogical Sciences. Lutsk National Technical University, Lutsk, Ukraine

здравоохранения обусловливает проведение комплекса предупредительных мероприятий для сохранения и укрепления здоровья человека. В данные мероприятия входит огромная по своим масштабам система мер по профилактике травматизма, в том числе в процессе физического воспитания. Для достижения этой цели нужно правильно организовывать занятия, создавать необходимые условия для обеспечения надлежащего уровня физического совершенства. Способствовать этому будет приобретение элементарных знаний и навыков, которые предотвращают получение травм, тяжелых повреждений, ухудшение состояния здоровья. Перед выполнением физических упражнений следует позаботиться о соответствующей экипировке: одежде, обуви, защитном снаряжении. Все составляющие спортивной формы должны быть подогнаны в соответствии с фигурой, чистыми. Пренебрегать специальными средствами безопасности абсолютно недопустимо. Никому не нужна бравада, переоценка своего физического совершенства, ложная уверенность в том, что подстраховывая средства тяжелые и некомфортные, что они создают впечатление отсутствия подлинного мужества, провоцируют студентов к травматизму. Следующее правило – качественная разминка. И это не формальность, как часто кажется студентам. Подготовительные упражнения, представление структуры предыдущих движений помогают привести в оптимальное состояние нервную систему, активизировать дыхание и кровообращение, «разогреть мышцы» и «прокрутить» суставы. Человек начинает лучше ориентироваться в пространстве, ее движения становятся экономнее, внутренние органы и системы получают свойство выдерживать жесткий режим физических и нервно-эмоциональных нагрузок.

Ключевые слова: профилактика, травматизм, физическое воспитание, студенство.

Introduction. Formulation of problems. On the modernity stage of development of society there is an intesive need of Physical training to increase level of physical endurance, health and protective functions of the body. Together with the development of Physical training is needed to create a secure environment while performing physical exercise, therefore, there is a necessity to create a method which would prevent injuries thus providing the best conditions for physical development. Since exercise can lead to injuries, preventive measures during physical education classes must be primal.

The problem of injuries and their prevention was the subject of research specialists in different areas. Raise issues in their scientific works dealt TJ Antennae, Y. A. Ostroverkha, I. P. Piskun, M. K. Khobzey, D. D. Alks, R. G. Agarkov, B. S. Monks, Z. I. Belousov, P. Statmyen, V. F. Bashkirov, A. A. Gorlov, L. P. Juice, G. McCaul, I. Hrubar. But it was work, which examined the nature of the child's injuries.

The aim of this artical is a theoretical substantiation of pedagogical conditions of prevention of injuries during physical training of university students.

Discussion and the Results of the Study. The relevance of the topic during recent events is not in doubt. In Ukraine, the number of deaths in physical exercise scares. Experts advise always to teach young people physical activity. In their opinion, students have health problems because they are not used to it. But it is well known that physical exercise should be gradual. Accordingly, in such cases, the injury is almost inevitable. However, doctors say the opposite – physical education – not sports, and therefore excessive pressure on physical activity workshops unacceptable because the average health of Ukrainian modern student is much worse than it was 30–40 years ago.

Parents of young students frightened by the tragic events that took place in the modern Ukrainian schools. What should teacher do? He must be on guard. He should create a pedagogical terms all possible measures to prevent the occurrence of injuries in class and be prepared properly to provide first aid when a child needs it.

Physical education in universities is an integral part of studies, which provides the possibility of acquiring each person needs scientifically based knowledge about health and to strengthen the means, methods leisure organization, which provides the possibility of acquiring each person needs scientifically based knowledge about health and to strengthen the means, methods leisure organization, which aims at developing their physical, social and spiritual health I improve physical and mental training to driving long active life and professional activities. The system of physical education of students is based on the principles of personal and differentiated orientation, health priority focus, using traditional and non-traditional forms of motor activity and other forms of physical perfection. The goal of physical education is to form individual aimed at ensuring the required level of essential motor skills and physical qualities; universal values: health, physical, social and mental well-being; education interests and habits of self-study physical education and sport skills of healthy lifestyles and prevention of injuries. Direct management of physical education in high school carries out its leadership. It shall be responsible for the state of physical education, sports and recreation activities in universities. responsibility for health and physical development of pupils; creating conditions for the development of instincts, natural abilities and talents of the young generation of the

spiritual and physical development of physical training facilities; creating the necessary conditions for physical education; classes with students who are classified as health to special medical group; sports and recreational activities in the mode of the day, playing area sports clubs; providing conditions for the implementation of science—based youth quantity of physical activity and its control; ensure regular monitoring of the educational process in physical education; Annual in-depth medical examinations on time; providing the necessary sports equipment and facilities; A systematic analysis of the physical development of students; ensuring compliance with hygiene standards and safety requirements in buildings; Students compliance regime of the day, personal hygiene and social requirements of safe behavior.

Preventive health Ukrainian direction causes a complex of preventive measures to maintain and promote health. As part of these measures in their huge scale system in its measures, on prevention of injuries, particularly in physical education.

To achieve this, you need to properly organize a class, create the necessary conditions to ensure the proper level of physical perfection. Contribute to this acquisition of basic knowledge and skills to prevent injuries, severe injuries, deterioration of health.

Research and practice of physical education shown that regular physical exercise promotes health, improvement of basic systems. However, the execution of motor actions should take place according to certain rules [2; 3; 4]. Failure to observe this leads to a variety of injuries that affect the entire human body.

The first rule – systematic medical examination. The medical opinion on access to do favorite sports type is fundamental. It is not only that the body may have one hidden imbalance. Suppose that a completely healthy student decided to do swimming. In this case, the damage to the teeth, even the most basic, will cause him a lot of trouble while he is in cold water. Some completely healthy people do not tolerate getting water in the ear. Drops of liquid irritant vestibular apparatus. So when you start physical activity classes, you should always get permission physicians.

Second rule – strict adherence to the principles of physical education. Silly example, by hardening join the «winter swimming», learn the basics of athletics marathon run, climb the tower for jumping into the water not knowing how to swim. With each case should be followed logical sequence and order. The new element, complicated exercise should be based on comprehend well learned. Tempo and rhythm can be increased only without overloading the body. A start physical education classes always with small volumes. Besides better deal with 3–4 times a week for 15 minutes than once an hour.

Before exercise should take care of the appropriate gear – clothing, footwear, protective gear. All components of fitness should be adjusted according to the figure clean. Ignore special security measures are absolutely unacceptable. Re-evaluation of their physical perfection, mistaken belief that insurance means heavy and uncomfortable, they give the impression of lack of genuine courage what provoke students to injuries.

Next rule – a quality workout. This is not a formality, as often seems to students. Preparatory exercises, understanding the structure of previous movements help bring in the best condition of the nervous system, enhance blood circulation and breathing, «warm up the muscles» and «scroll» joints. Man begins to better navigate in space, its movements are economical, internal organs and systems acquire properties to withstand the toughest regime of physical and neuro-emotional stress. If you take up sessions and especially to take the start without warming up – be trauma. The student seemed prematurely dooms itself to bruises, bumps, damage to muscles, tendons and so on.

During physical education classes is important to be gathered, careful and cautious. For each topic there are special techniques of self neglect that are necessary.

It is impossible not to mention about another problem that occurs during physical education classes. Sometimes a student is experiencing signs of early disease characterized by headache, fever and weakness. But peers to shame makes him wear a sports uniform and fully implement the program classes. This is detrimental to health, complicates the treatment of the disease and can lead to dangerous complications. There is no alternative! If any ailments exercise is strictly prohibited. Even after recovery playground output must necessarily be allowed by medical examination. Good health does not mean that the body is restored to function fully and danger had passed. The main thesis of medicine and physical education – enhance health, not destroy it!

Injuries at the gym often occurs due to lack of protective devices, handling facilities, poor methodology sessions, the presence of many foreign objects. To prevent accidents steam heating radiators, pipes, wires, stretching must close the grill or shield. The floor should not be slippery. For windows and lamps installed grid, lattice or transparent shields that keep them from ball knocks.

Injuries should be prevented at the classroom and outdoors. Tracks for running, for example, short–distance mark in such way that after the finish there is the reserve for at least 10–15 meters of space. Otherwise, the runner does not have time promptly «knock down» speed. These tracks can be used for takeoff during the course of jumps. Jumping pit in this case is not placed on the finish line, as in racing, but rather in the starting area. Note that it should fill completely clean sand without impurities. Sector for throwing equipped with regard to rocket – ball or grenade – not caused anyone harm, not harm neighboring coverage areas.

All elements of gymnastic towns and places with obstacles polished, covered with waterproof paint. You need to focus on the joints designs. They should not be heads of nails, screws, anything that could cause injury. Diameter metal pipes must be at least 30 mm.

The longitudinal axis playgrounds desirable target in the meridional direction from north to south. Permissible deviations should be not more than + (-) 20 mm. But where with strong winds longitudinal axis area is better positioned perpendicular to the direction of the cold wind. It is important that the surface area ensures rapid runoff of water after rain. This is achieved by coating uniformity entire sports complex and a small inclination of its surface from the center out. Another condition - timely care pads, leveling, garbage collection, leaves, snow, unnecessary items, regular watering in summer.

A special issue – the choice of water activities for practicing physical activity. On the coast, pond, lake, river or pond shore is used, which falls to the smoothest water approach to it must be free from thickets of sedges, reeds, podorosliv; bottom – solid depth – gradually increase. Before the swim, especially before games, jumping into the water, make sure that the bottom free of rocks, snags and other dangerous objects.

You may not swim near a drain dirty water, watering animals, ship berths, places to wash clothes. The control zone of sanitary safety is: river «blue arena» should be removed from the nearest source of contamination is not less than 100 m or above 500–600 m below current; on the pond with neprotochnoyu water at least 200 meters. For those who can not swim deep waters must not exceed 1 m. For diving, the figure depends on the height of the tower or springboard: for 3–meter tower and springboard – at least 3 meters to 5 meters – at least 4 meters to 10 meters – 5 meters.

Before visiting the artificial swimming pool helpful to students acquainted with the following information. Existing regulations allow swimming in one lane 50-meter pool at most 15 and 25-meter – no more than 10 people. If the track stretched across the pool, the maximum amount determined by the rate of one per meter length of track. At the bottom of the pool lined with glazed tile dark band that divides the track in half (not the Boundary Line between tracks, as some students). At both ends it has a T-shaped line from which the side of the pool equal to 2 m.

When assessing the depth of the reservoir should be careful because of the refraction of light rays the water depth always seems less than it is. Standing on the edge height of only 30 cm, a person growing 170 cm perceive the object loaded on 50 cm as the first track – at a depth of 45 cm, the second – 30 cm, the third – 22 cm. A false shallowness student who badly floats can cause unhappiness.

In winter, most injuries connected with the freezing weather, piercing wind. Snow and ice tracks should equip arenas in places well protected from wind and snow. Stepping onto the ice ponds and rivers is possible only after it reaches 10–15 cm thick.

It is important to take into account that in mountainous areas in the first 2–3 days after a significant snowfall and avalanches are possible thaw. Sports physical education and sport at that time prohibited [1].

As practice shows, diseases of the musculoskeletal system is much more common in physically prepared students than students with low levels of physical fitness. This is largely associated with a great physical activity in the classroom. A significant percentage of these changes is explained not responsible attitude to treat injuries.

Often the cause of injuries may be a violation of sanitary conditions for sports facilities, sports equipment and faulty equipment. Complications injuries in physical education caused by the lack of skilled care in the first few minutes or even seconds after an accident. Elementary knowledge, skills, timely assistance to victims can significantly improve his condition or even save lives.

Conclusions. Analyzing the scientific literature involuntarily ask yourself the question: Is injuries – an incurable pathology, the presence of which can only be stated. Injuries in physical education among students have been and remain a serious educational problem. Because of injuries occurring loss of working time for first aid and subsequent medical treatment and rehabilitation of victims, «that is unprofitable for the educational process». Pedagogical conditions of Injury prevention is the best way to combat injuries.

Prospects for Further Research in this area lies in determining the state of distribution of injuries during physical training of students.

Sources and Literature

- 1. Бичук О. І. Фізкультурно-оздоровча робота у школі: [навч. посіб. для студентів ВНЗ фіз. вих. та спорту]. Луцьк: Надстир'я, 1997. С. 127–128.
- 2. Горбунов В. В. Заповеди физкультурного благополучия. *Физическая культура в школе*. 1988. № 5. С. 54–57.
- 3. Гринь Л. В. Травматизм у спортсменов-борцов и его профилактика. *Педагогіка, психологія і медико-біологічні проблеми фізичного виховання і спорту*. Харків, 2002. № 24. С. 94–98.
- 4. Лепешкин В. А., Шабалин А. Ю. В целях предупреждения травматизма. *Физическая культура в школе*. 1988. № 10. С. 62–63.
- 5. Платонов В. Н. Травматизм в спорте: проблемы и перспективы их решения. *Спортивна медицина*. 2006. №1. С. 54–77.
- 6. Спортивні травми. Клінічна практика запобігання та лікування/за заг. ред. Ренстрама П. А. Ф. Х. Київ: Олімп літ., 2003. 156 с.

References

- 1. Bychuk, O. I. (1997). Fizkulturno-ozdorovcha robota u shkoli: [navch. posib. dlia stud. VNZ fiz. vykhovannia ta sportu] [Health and fitness work at school]. Lutsk, Nadstyria, 127–128.
- 2. Horbunov, V. V. (1988). Zapovedi fizkulturnoho blahopoluchiia [Commandments of athletic well-being]. *Fizicheskaia kultura v shkole*, № 5, 54–57.
- 3. Hryn, L. V. (2002). Travmatizm u sportsmenov-bortsov i eho profilaktika [Traumatism in bone-breaker athletes and its prevention]. *Pedahohika, psykholohiia i medyko-biolohichni problemy fizychnoho vykhovannia i sportu*, Kharkiv, № 24, 94–98.
- 4. Lepeshkin, V. A. & Shabalin, A. Yu. (1988). V tseliakh preduprezhdeniia travmatizma [In order to prevent traumatism]. Fizicheskaia kultura v shkole, № 10, 62-63.
- 5. Platonov, V. N. (2006). Travmatizm v sporte: problemy i perspektivy ikh resheniia [Traumatism in sport: problems and prospects for their solution]. *Sportyvna medytsyna*, № 1, 54–77.
- 6. Sportyvni travmy. Klinichna praktyka zapobihannia ta likuvannia (2003) [Sports injuries. Clinical practice of prevention and treatment]. Kyiv, Olimp lit., 156.

Стаття надійшла до редакції 29.05.2017 р.