Государственное профессиональное образовательное учреждение

«Тульский областной медицинский колледж»

Цикловая (предметная) комиссия

общих гуманитарных и

социально-экономических

дисциплин

Математика

Методическая разработка по теме

«Иммунитет»

Специальности: 34.02.01 «Сестринское дело»

31.02.01 «Лечебное дело»

33.02.01 «Фармация»

Тула

2016

Рассмотрено и одобрено на

Заседании Ц(П)К ОГСЭ

Протокол №\_\_от \_\_\_\_\_\_\_\_

Председатель Ц(П)К Амелина Н.В.

Преподаватель Индионкова И.Н.

**Пояснительная записка.**

Данная методическая разработка предназначена для преподавателей дисциплины «Английский язык» и студентов 3 курса всех специальностей.

1. **Тема занятия** «Иммунитет».
2. **Цель занятия:** активизация лексического и грамматического материала по теме «Иммунитет».
3. **Задачи:**

- **образовательные:**

- отработать лексико-грамматического материала по теме;

-отвечать на вопросы по содержанию текста;

-манипулировать структурными компонентами текста для составления монологического высказывания по теме;

- **развивающие:**

-развивать навыки овладения анатомической терминологией на английском языке;

- способствовать развитию интеллектуальных способностей − памяти, воображения, мышления;

- развивать умения наблюдать, сравнивать, обобщать, делать выводы;

**- воспитательные:**

- формировать у студентов познавательного интереса;

- поощрять стремление расширять кругозор;

- развивать умение работать в составе малой группе.

**4. Внутридисциплинарные связи:** Темы «Возбудители инфекционных заболеваний», «Влияние окружающей среды на здоровье человека», «Здоровый образ жизни».

**5. Междисциплинарные связи: «**Основы латинского языка с медицинской терминологией», «Гигиена», «Патология», « Основы микробиологии и иммунологии».

**6. Время проведения:** 90 минут.

1. **Литература:** Английский язык для медицинских колледжей и училищ: учебное пособие. Л.Г. Козырева, Т.В. Шадская.

Английский язык. Учебник для медицинских вузов и медицинских специалистов. И.Ю.Марковина, З.К.Максимова.

Professional English in Use. Medicine. Eric H.Glendinning, Ron Howard.

**План-хронокарта занятия.**

1. Организационный момент − 2 мин.
2. Выполнение упражнений предтекстового этапа – 18 мин.
3. Чтение и перевод текста - 25 мин.
4. Выполнение упражнений послетекстового этапа -20 мин.
5. Самостоятельная аудиторная работа студентов – 20 мин.
6. Подведение итогов занятия − 3 мин.
7. Домашнее задание − 2 мин.

**Ход занятия**

1. **Организационный момент.** Проверка готовности студентов и аудитории к занятию.
2. **Выполнение упражнений предтекстового этапа.**
   1. **Прослушайте и прочтите следующие слова вслух, обратите внимание на произношение.**

lack – недостаток, не хватать relative – относительный

previous – предыдущий subcutaneous - подкожный

employ – применять, использовать permanent – постоянный

capacity – способность a sufficient amount – достаточное количество

occur – случаться, происходить to invade – вторгаться

to surround – окружать to destroy – разрушать

recovery - выздоравление immune – невосприимчивый

previous – предыдущий tissue – ткань

due to – благодаря mucous- слизистый

growth- рост to be able – быть в состоянии

subsequent- последующий infection – инфекция

produce- производить disease- болезнь

resistance – сопротивляемость protective – защитный

virulent – заразный to prevent – предотвращать

spread – распространение vital – жизненный

suffer – страдать moderate – умеренный

listlessness- апатия, безразличие susceptibility – восприимчивость

**2.2. Прочитайте и переведите следующие словосочетания.**

The immune system, infectious diseases, a capacity of resistance against infection, permanent protection, to suffer from all infectious diseases, an artificial immunity, the cellular elements of the tissues, to prevent the spread of bacteria, to contribute to the treatment of a disease, stress reduction.

**2.3. Аудирование короткого текста на тему: «Что такое иммунитет?»**

**The Science of Immunology**

All animal species are equipped to defend themselves against aggressors. Man’s real insight into the nature of infectious diseases is known to have come a hundred years ago.

The science of immunology began with an attempt to understand resistance to infection, which was thought to be the only function of the immune system. Its relationship to hypersensivity was recognized early in the 20 th century and led to explanation of the general biologic functions of the immune system, including a role of immunity to cancer, prevention of tissue transplantation from one individual to another, and the capacity of causing diseases by injuring normal tissue.

**3. Чтение и перевод текста.**

**Immunity**

Infectious diseases are known to be caused by the invasion and growth of microorganisms in the human body. Infection may result from direct contact with patients or from indirect one.

But the human organism is known to have a specific capacity of resistance against infection, which is called **immunity**, is being natural and artificial (рис.2). Under various conditions it may be entirely lacking, it may be relative, rarely it may be absolute. A previous attack of an infectious disease produces a more or less permanent protection against subsequent infection.

In the course of their growth in the body many pathogenic microorganisms produce virulent poisons or toxins; they cause the characteristic symptoms of a particular disease. To meet the infection the cells of the body produce a chemical antidote which is specific for this particular infection and is known as an antitoxin. If the patient can produce a sufficient amount of this antidote to neutralize the toxins before the vital organs are injured recovery occurs. If the human body had not this capacity we should suffer from all infectious diseases.

If the toxin can be isolated from bacterial cultures and injected into men an artificial immunity can be produced which results from the formation of antitoxin.

The cellular elements of the tissues also take part in the protection of the organism against the infection. The presence of any infection usually produces leucocytes and bacteria in the tissues are surrounded by white cells or phagocytes which prevent the spread of bacteria destroying them.

If the reaction against invading bacteria is insufficient, vaccines may be injected subcutaneously to produce a more active resistance of the protective mechanisms of the body. Vaccines are employed not only to contribute to the treatment of a disease, but to establish an active artificial immunity.

Health can only be achieved and maintained with the support of a healthy immune system. The immune system is a complex structure of specialized cells, organs, lymphatic vessels, serum factors in the blood and the harmony they require to work well together. The immune system fights off disease-causing microorganisms and engineers the body’s healing processes. Signs of weakened immunity are all signs of increased susceptibility to illness.

Symptoms of weakened immunity may include:

* fatigue;
* listlessness;
* repeated infection;
* inflammation;
* allergic reactions;
* slow wound healing;
* chronic diarrhea;
* more than two colds per year;
* difficulties with memory and concentration;
* aches and pains;

**-** mood disorders.

**How Can I Strengthen My Immune System?**

While it is difficult to enhance a normal functioning immune system, there are things that you can do to protect and strengthen your immune system during periods of illness or in the face of chronic disease. The three areas that are most important in protecting and bolstering the immune system are diet and nutrition, exercise, and stress reduction.

**4.Выполнение упражнений послетекстового этап**а.

**4**.**1. Найдите в тексте эквиваленты следующих слов:**

недостаток, не хватать- способность-

вторгаться- выздоровление-

ткань- рост-

быть в состоянии- сопротивляемость-

заразный- предотвращать-

распространение- усиливать-

**4**.**2. Найдите в тексте ответы на следующие вопросы:**

1) What are infectious diseases caused by?

2) What is immunity?

3) What do the cells of the body produce to meet the infection?

4) When can recover occur?

5) What also takes an active part in the protection of the organism against infection?

6) What helps to establish immunity?

7) What is the immune system?

8) What are the signs of weakened immunity?

**4.3. Составьте письменно план текста.**

**5. Самостоятельная аудиторная работа студентов (работа в мини группах)**

**Ролевая игра. Составление диалога «Рекомендации по укреплению здоровья»**

Role-play: You are the doctor’s assistant. The patient complains of his problems and asks you to help him with the questions which bother him:

* Why am I constantly feeling sick?
* Is my smoking becoming a problem?
* Am I eating a healthy diet?
* Can I get help with my stress?
* Why do I toss and turn during sleep?
* Can I improve my immune system?

**Используйте выражения:**

You should… .

I’d like to recommend you… .

I think you should… .

I advise you to … .

You’ better… .

You must … .

You’d rather … .

You’d better not to … .

**Презентация составленных диалогов.**

1. **Подведение итогов занятия. Выставление оценок.**
2. **Объяснение домашнего задания.**

Прочитайте дополнительные тексты по теме «Иммунитет» (см. Приложение 2), сделайте плакаты с рекомендациями «Как укрепить иммунитет».

***Приложение 1.***

**Эталоны ответов**

**1.Найдите в тексте эквиваленты следующих слов:**

lack – недостаток, не хватать capacity – способность

to invade – вторгаться recovery - выздоровление

tissue – ткань growth- рост

to be able – быть в состоянии resistance – сопротивляемость

virulent – заразный to prevent – предотвращать

spread – распространение to enhance - усиливать

**2.** **Ответы на вопросы:**

1) Infectious diseases are caused by the invasion and growth of microorganisms in the human body.

2) Immunity is a specific capacity of resistance against infection.

3) The cells of the body produce a chemical antidote to meet the infection.

4) Recover occurs if the patient can produce a sufficient amount of antitoxin to neutralize the toxins.

5) The cellular elements of the tissues also take an active part in the protection of the organism against infection.

6) Vaccines help to establish immunity.

7) The immune system is a complex structure of specialized cells, organs, lymphatic vessels, serum factors in the blood and the harmony they require to work well together.

8) The signs of weakened immunity are fatigue, listlessness, repeated infection,

Inflammation, slow wound healing, allergic reactions, chronic diarrhea, more than two colds per year, difficulties with memory and concentration, aches and pains, mood disorders.

***Приложение 2.***

**Exercise May Be Just What the Doctor Ordered**

Fighting winter colds may be easier for people who exercise on daily basis, because regular workouts may boost the immune system and increase resistance to colds and flu.

Too many exercises, on the other hand, may weaken the immune system and pave way for upper respiratory tract infections.

New studies show that people who exercise regularly may get sick less often than those who don’t.

In the walking group, natural killer cell activity increased. Immune – enhancing effects occurred during the walk and about one hour afterwards.

Another moderate exercise may boost the immune system is its stress –relieving capacity. Numerous studies indicate that exercise helps to reduce stress and raise mood. Research also shows that people under severe stress have impaired immune system activity. The physical and psychological stress of excessive exercise puts people at a higher risk of colds and flu.

**Food**

You can modify your diet by eating less saturated fat and animal protein (particularly red meat), by limiting dairy products (particularly those with fat), by modifying your use of oils and fats, and by eating more fresh fruits,

Try eliminating red meat from your diet or, if necessary, eat it no more than once every 10 days. Also eliminate or reduce your intake of fried meats. Try to replace the meats in your diet with servings of fish, particularly oily fish such as salmon.

Eat more fruits and vegetables. Green leafy vegetables such as broccoli are very rich in antioxidants. Add several servings a week to your diet. Do not overcook them and think of creative ways to prepare them. Add more servings of other fruits and vegetables to your diet, as they are rich sources of antioxidants as well.

Add fiber to your diet. Fiber can be found in many types of whole grains. If you are going to add rice, which is healthy, try to add brown rice.

Drink plenty of water.

**Stress and immunity**

The final component for fine-tuning your immune system is reducing the stress in your life by achieving a higher level of spiritual harmony. Altered mood states such as depression, anxiety, and panic are harmful to the body in many ways. Secondary symptoms such as fatigue, difficulties with memory and concentration, aches and pains, and problems with sleep are common in people with mood disorders. Mood disorders also harm the immune system.

There are many techniques you can use to reduce stress and anxiety in your life. Simple techniques include breathing exercises or taking a walk and appreciating the beauty in the world around you.

Eliminate other negative factors such as drugs, alcohol, and tobacco.