ОГБПОУ «Рославльский медицинский техникум»

**ФАКТЫ О МЕДИЦИНЕ**

**Дроздова Вероника**

**Группа 11 фмк**

**специальность 33.02.01 Фармация**

**(очная форма обучения**

**ускоренное обучение по индивидуальному учебному плану)**

**FACTS ABOUT MEDICINE**

**Veronika Drozdova**

Рославль

2020

**Introduction**

Medical breakthroughs are happening all the time, and amazing scientists are working to eliminate diseases forever.

Modern medicine is truly amazing. Billions of lives have been saved because of it. With new breakthroughs in medicine comes a higher life expectancy than ever before and more treatments for illnesses than our ancestors could have dreamed of. This report offers a look at some of the biggest lifesaving discoveries in history.

**Twelve key life-saving discoveries throughout the history**

1. Blood Transfusions

Karl Landsteiner, an Austrian native, was always intrigued by blood, to say the least. He occupied his time studying its properties, and soon discovered the four different blood types. That led to the discovery that the body will not accept blood unless it is from someone with the same blood type. His discoveries have made blood transfusions possible for the world.

2. Eradicating Smallpox

The very first successful vaccination was the smallpox vaccine in 1788 by Edward Jenner. Smallpox was then a serious epidemic with the capability to wipe out entire towns. He discovered that if he used liquid from the pustules of cowpox, he could prevent smallpox altogether. The disease has been eradicated in most countries since then.

3. Measles Vaccine

John Enders (the Father of Modern Vaccine), in conjunction with Thomas Weller and Frederick Robins led the study on the measles vaccine. Following World War II, Enders began a children’s hospital in Boston, where he saw too many cases of measles to count. With effective research and study, he was able to produce the first vaccine in 1963. He had previously earned a Nobel Prize for his work on the polio vaccine.

4. X-Ray

C. Roentgen, a German physicist, first discovered the X-ray in 1895 when he was working with a cathode ray tube. He experimented with the way the tube reacted to fluorescent light bulbs and electric voltage, thus discovering the X-ray. The first X-ray picture was a photo of Roentgen’s wife’s right hand with a ring. Since then, it has been used in many capacities to save lives.

5. Penicillin

Penicillin is a widely used antibiotic that was discovered in 1928 by Alexander Fleming. The discovery is considered to be almost a lucky accident. A petri dish containing staphylococcus bacteria left overnight revealed the antibiotic properties to him when he noticed that a mold was actively repelling the bacteria. This led to the first development of penicillin the drug. Howard Walter Florey picked up the work twenty years later, and headed the development of the drug for clinical trials. Since then, it has been an important antibiotic for fighting off life threatening viruses and fevers.

6. Germ Theory

Prior to the discovery of germs, medical treatments took on an entirely different tactic. Patients were often advised to carry foul smelling items with them in order to ward off “bad air.” Obviously, this did not really help, which was proved in 1854 when John Snow discovered that an outbreak of cholera was actually caused by bad water in London. Once he isolated the source, he studied it and discovered germs. Since then, cleanliness has become a staple in modern medicine and numerous other practices, saving countless lives.

7. Oral rehydration therapy

In the past, millions died from dehydration caused by diarrhea each year, with children being especially vulnerable. Severe diarrhea can lead to a multitude of symptoms including severe dehydration, shock, coma, and death within hours. Thanks to Dr. David Nalin’s work in 1968, we have oral rehydration therapy (ORT) which is basically a solution of salt, sugar, and water administered orally to rehydrate dehydrated patients suffering from cholera and other diseases.

8. Diphtheria and tetanus vaccine

Diptheria, often referred to as “the strangling angel,” crippled the lives of many, and tetanus made normal life impossible. The prevention of both these diseases did not get its start at a medical lab, like so many other vaccinations. It was discovered by a veterinarian who used his knowledge of animals to save the world from these two horrible viruses.

9. Insulin shots

Diabetes is a serious medical condition that has caused far too many premature deaths. It was not until 1921, when Frederick Banting discovered a way to use insulin from the pancreas to treat diabetes, that diabetics were able to live a somewhat normal life. Years later, insulin can now be manufactured in laboratories. Banting’s discovery of insulin has led to improved quality of life for millions.

10. Angioplasty

Angioplasty, a key leader in treating heart disease and other cardiac problem, was discovered by Andreas Gruentzig, a young German doctor. Gruentzig was not the first to discover the science of eliminating blockages in the arteries around the heart, but his idea to add an inflatable component to the catheter led to the groundbreaking version of life-saving angioplasty today.

11. Artificial pacemaker

In the past, those with a dysfunctioning pacemaker struggled with proper circulation, were at deadly risk for heart attacks, and had an extremely low life expectancy. With the invention of the artificial pacemaker, all that changed. The device was made to maintain a steady heart rate in order to keep blood flowing and circulation fresh throughout the body. The first version of the pacemaker was made in 1889 by John MacWilliam, a doctor who discovered the benefits of administering an electrical impulse to the human heart in order to apply proper pacing between beats. Since then, the pacemaker has only improved to be more convenient and effective for patients.

12. Polio vaccination

Polio is one of the most debilitating illnesses in history. The year before the vaccine came out, over 55,000 polio cases were reported in the United States. Perhaps the most famous case was that of President Franklin D. Roosevelt who was left in a wheelchair after contracting the illness as a child. Fortunately, American virologist Jonas Salk developed the polio vaccine in 1953, and since then, polio has been eliminated in most countries.

**Conclusion**

Thanks to the many men in history who devoted their lives to the study and development of each of these medical advancements, truly countless lives have been saved. We enjoy the luxury of a higher life expectancy than ever, and thanks to science, these developments are still progressing and improving the overall quality of life day by day.

BIBLIOGRAPHY

1. M. Friedman, G.W. Friedland. Medicine's 10 Greatest Discoveries Paperback – 1 January 1999.
2. Ten Medical Inventions of All Time That Changed the World – Режим доступа: <https://interestingengineering.com/10-medical-inventions-of-all-time-that-changed-the-world>. – (Дата обращения: 02.06.2020)