

Fighting Disease Key People



Paul Erlich 1854-1915

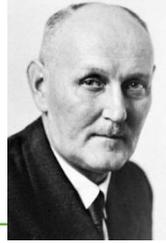
Key Discovery: Created the Chemical Magic Bullet Salvarson 606

Before: Treatments for disease had been fairly dire. Mercury was used to treat Syphilis but could lead to poisoning including teeth and hair loss and even death.

After: Salvarson quickly became a very popular treatment and was used widely. The idea of a Magic Bullet to cure illness was used by Domagk and Florey and Chain and even into today. Salvarson was quickly overtaken by antibiotics.

During: His work was widely accepted.

Factors: Chance, Individual Genius (he used Koch's work), technology



Gerhard Domagk 1895-1964

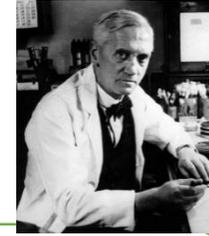
Key Discovery: Created Protosil against Blood Poisoning.

Before: Salvarson 606 had been widely used. Domagk thought there would be other cures.

After: Sulphonamides would go onto be the precursors to antibiotics. They were widely used and very popular. Quickly surpassed by antibiotics

During: Ideas widely accepted.

Factors: Chance (he tested this out on his daughter when she caught blood poisoning whilst playing in his lab), Technology, Individual Genius



Alexander Fleming 1881-1955

Key Discovery: Discovered that Penicillium mould killed bacteria

Before: Chemical cures were widely used but little has been done on natural cures. Lister had noticed that some mould killed bacteria in the 1870s.

After: His work was used by Florey and Chain to discover and mass produce Penicillin. We still used Penicillin today

During: Work was forgotten as he only wrote a few lines about his discovery in another paper. Collected the Nobel Prize alongside Florey and Chain after the mass production of Penicillin.

Factors: Chance (he went on holiday mould contaminated his samples), Technology, Individual Genius



Florey and Chain 1898-1968, 1906-1979

Key Discovery: Mass produced Penicillin

Before: Fleming had discovered Penicillium mould and Lister had said some mould killed bacteria.

After: Penicillin is widely used today and more antibiotics were produced. There are still problems around antibiotic resistance though.

During: The work was recognised and they shared the Nobel Prize with Fleming. It is possible they helped us win WW2 as Penicillin was produced in time for D-Day meaning we had more soldiers remaining fit for fighting.

Factors: Government, War, Technology, Individual Genius