

The History of Healthcare with Dr. Steven Goetsch  
Steve-UC San Diego

1. The pilgrims started looking at healthcare?
  - a. 1620-Myles Standish-physician; Samuel Fuller-surgeon
  - b. Epidemic in Native Americans
  - c. Half of colony died in first year
  - d. Benjamin Rush-George Washington's personal physician
2. Epidemics/Smallpox/Vaccinations?
  - a. Constant Plague in Europe
  - b. New Americans suffered from settlers--guns, germs, and steel
  - c. 95% of people in South America died of smallpox
  - d. 1791-crisis of smallpox
  - e. 1800 had been removed due to vaccine
3. Era of bloodletting-4 liquid humors. How, what, when, consequences?
  - a. Greeks got this practice wrong
  - b. If you got sick it was because these 4 liquid humors got out of balance
  - c. Hippocrates--difference in physicians and surgeons
  - d. Surgeons had no medical training/barbers were surgeons
  - e. George Washington/Ben Franklin practiced bloodletting
4. Quackery to bacteriology? 19th century? What happened that led to scientific approach?
  - a. Germ theory, antiseptic techniques
  - b. Civil War--surgery consisted of sawing off affected limb
  - c. Opium--soldiers became addicts
  - d. Johns Hopkins Med School--was based on scientific principles
  - e. Live at hospital--term residents
5. Medical schools closed due to no regulation.
  - a. Physician was mass murderer; how did he get into med school--just paid money to get in
  - b. Harvard Med school was 2 years and no patient contact
  - c. HH Holmes--The Devil in the White City book
6. Medicine during the great wars. More soldiers in WWI died of combat than disease, but barely.
  - a. Prior to WWI, more soldiers died of disease than combat
  - b. 1 million troops sent to WWI
  - c. Coincided with flu pandemic, neither side could fight because they were too sick to fight.
  - d. War has always been an innovator--blood banks, blood typing, Marie Curie invented x-ray machines on carts in battlefield
  - e. Cushing did up to 8 brain surgeries per day
  - f. Mustard gas-killed 1000s of people, wiped out WBC, led to first chemotherapy drug
7. Infection? Modern public health system had started cleaning up. What did we learn, what eluded medicine?
  - a. Number of people that died through the years
  - b. Spike in deaths in 1881 for flu spike

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- c. Open public sewers, dysentery, typhoid, smallpox
  - d. Vaccines for MMR, smallpox
  - e. Electron microscope--viruses
  - f. Cancer began to show up right after WWI--very difficult to treat
8. Accreditation of hospitals--WWII better trained physicians due to GI Bill. What all happened during the time of WWII?
- a. Development of the atomic bomb, nuclear reactors, linear accelerators
  - b. Penicillin fight bacterial disease and venereal disease
  - c. Malaria drugs
  - d. Combat medicine improved dramatically through blood typing, medics
  - e. GI Bill of Rights--physicians came out after depression and WWII
  - f. America said let's do better, explosive development
9. 1965 was first US and early 70s CT and PET? How did they come about and what did they look like?
- a. 1954-Salk vaccine for polio
  - b. CXR looking for TB
  - c. Before CT was only film projected imaging
  - d. First US were smudgy, good for blood clots and looking at babies
  - e. CT-cross sectional imaging, initially intended for brain imaging
  - f. Exploratory surgery just to see what was going on. This went away due to imaging.
  - g. Pacemakers came in at this time
  - h. First kidney transplant was in 1955
10. Worldwide healthcare stats for 2017 ... US ranks 30 hospital beds per 10,000 patients. Why the deficit in caregivers? Where we stand in worldwide stats and what about going forward?
- a. US has most expensive in the world
  - b. Not #1 in healthcare stats
  - c. Inefficient in delivery, money goes to billing and insurance
  - d. Mid-century 30,000-50,000 physician shortage
  - e. Don't have enough people
  - f. Other countries have better results in infant mortality and lifespan
  - g. 18% of US GNP
  - h. Starting to get spending under control, now it is time to make it better
11. Anything else?
- a. Next big thing?? Genomic medicine? CRISPR?
  - b. Liquid biopsies
  - c. Who knows what will happen in 100 years