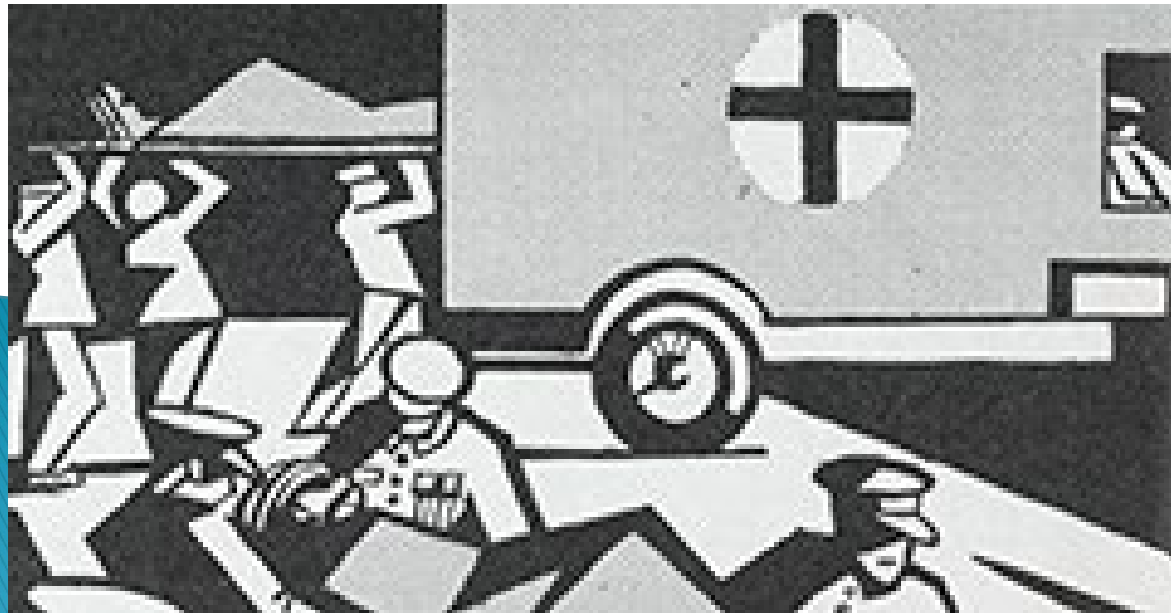


Modern Medicine: The Impact of War

Starter: In what ways has war led to progress in medicine since the Middle Ages – can you think of specific examples?



Modern Medicine: The Impact of War

Copy and complete

- ▶ War is an important f_____ driving change
- ▶ If m_____ services are good more soldiers will s_____ and return to combat increasing the c_____ of victory
- ▶ Medicine develops r_____ as governments pour m_____ into finding new ways of t_____ servicemen
- ▶ New w_____ such as m_____ guns, high explosive s_____, g_____ etc. inflict terrible injuries
- ▶ Doctors and surgeons on the b_____ have to develop new ideas in order to s_____ lives
- ▶ Doctors and surgeons have more o_____ to test out new ideas
- ▶ Over 10 m_____ people were k_____ in WW1 and over 20 million in WW2. Millions more were i_____.

Medical factor survive million machine injured chance
Weapons money battlefield opportunities killed rapidly treating
Gas shells save

How did war make a difference to surgery?

- ▶ Use the information boxes to complete the table showing the impact of WW1 and WW2 on surgery
- ▶ Read the section on P72 and list the positive and negative impact of war on medical progress?

Challenge:

Does the positive outweigh the negative? Explain

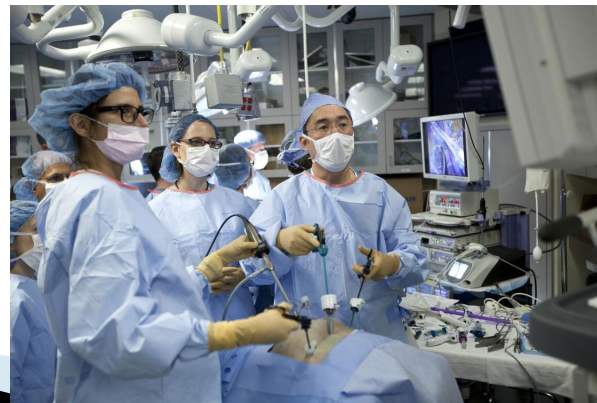
Watch these clips and make notes

- ▶ <https://teara.govt.nz/en/video/46399/great-war-stories-harold-gillies-in-the-first-world-war>
- ▶ <https://www.youtube.com/watch?v=my14ZuzjH5I>

Impact of technology on surgery

- ▶ Read page 75 (impact of technology on surgery)
- ▶ Match the beginning of the sentence to the end write these out (on the same sheet as your table)

CHALLENGE: Explain how technology has helped developments since the second world war



What else led to progress in surgery?

- ▶ More effective and safer anaesthetics have been developed
- ▶ Modern anaesthetics use a mixture of chemicals to produce gradual loss of consciousness and a reduction in pain.
- ▶ Patients recover more quickly and experience fewer side effects.
- ▶ Surgeons can work more slowly and more carefully and attempt complex and delicate procedures.
- ▶ Specialised anaesthetics allow brain surgery with the patient still conscious. Epidurals are commonly used in childbirth
- ▶ Local anaesthetics are now routinely used for all kinds of minor surgery including dentistry.
- ▶ Local anaesthetics are safe and easy to administer. Cocaine was first used as a local anaesthetic in 1884, numbing one part of the body while the patient remained conscious. In 1905 novocaine was found to be more effective.
- ▶ In 1942 surgeons used curare, a South American poison, as a muscle relaxant – it is still in use today.

CHALLENGE: Can Science and Technology go too far? Ethical questions to think about

- ▶ Is it right to enable a childless couple to have a baby?
- ▶ Is it right to allow couples to choose the sex of their baby?
- ▶ Have the advances in transplant surgery encouraged an illegal trade in kidneys and other organs 'taken' from the poor in other parts of the world?
- ▶ Are their echoes of the Nazis in attempts to remove genetic defects from society / create a perfect race?
- ▶ Embryo research – when is the cut off point?
- ▶ Mitochondrial donation and three person babies?
- ▶ <http://www.bbc.co.uk/news/health-37485263>
- ▶ Is cloning acceptable?

Just because something is possible doesn't mean it is desirable....