

History of Surgical Technology

(0:08 - 0:20)

Hello everyone, and welcome back to our channel. A while ago, we made a video on the history of surgery. If you haven't watched that, go do it after this, which you all loved, so we thought we'd make more surgery-related content for you guys.

(0:21 - 0:32)

That is why today we have a video on the history of surgical technology. It's all stupid interesting, and we'll be talking about a role in hospitals that is so important, but also so underrated. So, let's begin.

(0:33 - 0:48)

To the operating theatre, don't forget your gloves. What is surgical technology? To start off with, let's understand what surgical technology is. You might hear the word technology and think about cool gadgets and smart systems, but that's not exactly right.

(0:48 - 1:07)

Surgical technology is a field of medicine studied and practised by health professionals who work as a team to deliver surgical care. Surgical technologists, also known as surgical technicians, or more commonly as scrubs, remember the TV show. They are members of an operating room team who work under the authority of a surgeon.

(1:07 - 1:28)

They're part of a five-member team which includes a circulating nurse, surgical resident or first assistant, an anesthesiologist, and of course the surgeon. These technologists have a number of different roles and responsibilities, and we'll quickly go over them before we get into the history of their profession. Surgical technologists are crucial at every step of the surgery process.

(1:29 - 2:06)

Before surgery, some of their duties may include cleaning wounds with surgical antiseptics, such as chlorhexidine or povidone iodine, and surgically skin prepping the area of the body where surgery is to be performed with 70% alcohol or some other chlorhexidine-based solution, as well as setting up the operating room with surgical instrumentation, supplies, medication, and all necessary equipment. In the OR, surgical technologist and everyone else wears personal protective equipment, PPE, like surgical gowns, masks, and surgical caps. They'd also aid the surgeon with dunning or attire such as gowns and gloves.

(2:06 - 2:28)

Prior to the donning of gown and glove, surgical technologists perform the act of washing fingernails, hands, and forearms with bactericidal soap solution or chlorhexidine-based gel in a prescribed manner for a specific time. This whole process is known as the surgical scrub, which is why surgical technologists are also known as scrubs. Bet you didn't know that.

(2:28 - 2:53)

During surgery, they provide the surgeon with all the instruments they ask for, and also perform other tasks like retracting organs in place if needed. So all those scenes in medical dramas where the surgeon says scalpel, a surgical technologist is the one giving them the instrument. And finally, after surgery, they help transfer patients out of the room and take care of their other needs, like providing them with sterilised clothing.

(2:53 - 3:19)

Even outside of active surgery, some technologists may do things like ordering supplies and maintaining records of procedures. World Wars Alright, now that we have that covered, let's learn about the fascinating history of this profession. The first surgeries were recorded almost 4,000 years ago, and even back then the surgeons, who were mostly wise priests that knew about the medicine of that time, were always helped by assistants during procedures.

(3:19 - 3:45)

This is probably the only thing that hasn't changed about surgery since then. However, the official profession of surgical technology began during the 19th century, at the time of World War I and World War II. The United States Army required a huge number of medical professionals to work alongside the infantry to treat the injured, and so in 1944 together with the government, the National War Department, they built the Medical Department of the War.

(3:46 - 4:19)

A tonne of citizens registered to be trained, and after graduating from a surgical residency, which was shortened to 27 months due to the war, they were put into surgical units based around one surgeon. These units consisted of a general surgeon, a thoracic surgeon, an anaesthetist, a young man with extensive surgical knowledge, and four other men with clear and steady hands. Sound familiar with the different jobs of a modern-day surgical technologist? But it being the war, it was getting more difficult each day to assemble such a team.

(4:19 - 4:36)

Most of the enlisted men were called to battle either overseas or locally, where many died or were too severely injured to return to medical practise. Also at the time, female nurses were not allowed on combat ships and were required to work at medical stations. So there was a severe

lack of surgical aids.

(4:37 - 5:08)

This led to the invention of a new profession called Operating Room Technician, ORT, who acted in the position of female nurses. Following this, special nursing programmes were set up, which also had shortened programmes like the residencies mentioned earlier, and focused specifically on teaching operating room technology. These nursing assistants that were a part of this new programme learned all the surgical technology techniques we talked about earlier like sterilising equipment and how to take care of patients during all the steps of surgery.

(5:08 - 5:36)

Almost a decade later, after the Korean War in 1953, there was once again a shortage of operating room nurses since most of them were killed or injured in the war between North Korea and South Korea, in which the U.S. heavily intervened. This led to surgical supervisors hiring ex-army medics and ex-corpsmen, who are military enlisted people trained in medicine. Yes, the same ones trained as ORTs to work in normal civilian hospitals.

(5:37 - 6:13)

These men worked as circulators, who are the people that look after patients throughout surgery, while the registered nurses handled instruments. These roles were reversed much later in 1965. Modern Organisations Moving forward another 10 years after the Korean War, in 1967, the Association of Perioperative Registered Nurses, ALRN, published an academic book on the subject of teaching ORTs, which was followed by their board of directors, creating a separate body for ORTs specifically, termed the Association of Operating Room Technicians, AORT.

(6:13 - 6:43)

Thus, AORT formed two other committees, one of which is now known as the National Board of Surgical Technology and Surgical Assisting, or NBSTSA. Operating Room Technicians could now get proper certification from the official board of the US. Nearly a decade after their inception, in 1973, AORT became a separate organisation independent from the ALRN and changed the title of ORT to Surgical Technologist, ST, which is what we know the position as today.

(6:44 - 7:10)

Consequently, AORT also became the Association of Surgical Technologists, AST. It now represents more than 80,000 surgical technologists and has 50 state assemblies within the US alone. In 1985, the official AST Code of Ethics was established, based on the operating strategy of the Association, as well as other ethical principles such as honesty, objectivity, equality, and many more.

(7:11 - 7:36)

In Mozambique On the other side of the world in Mozambique, the field of surgical technology was created for much the same reason as it was in the States. In 1984, after the Mozambican Civil War, the country's health sector was ruined and there was a severe shortage of surgeons. And so, surgical technologists were introduced and trained to provide complete medical and surgical care, which was especially needed in rural areas.

(7:37 - 8:05)

Surgical technologists in the country provide advanced surgical services and mainly manage trauma and participate in emergency surgeries, and may also act as hospital administrators. They also work independently in the absence of a physician. Now it is estimated that 90% of obstetric surgeries in Mozambique are performed by surgical technologists, who are also known as clinical officers, clinical associates, or assistant medical officers in various other countries.

(8:05 - 8:29)

Modern day Now, in the 21st century, there are hundreds of schools and professional colleges all over the world that offer surgical technology courses. After graduating from these two-year programmes and earning a degree in applied sciences, one becomes a fully certified surgical technologist. These technicians can also go on to obtain many specialities in fields that include neurology, cardiovascular, and ENT.

(8:30 - 8:59)

Surgical technicians now are highly skilled and have a lot of knowledge about hundreds of different surgical procedures and instruments. This profession keeps growing and is in quite high demand these days, with people getting more surgeries every day and advancing technology making it possible to perform many surgeries not possible before. Although surgeons are the main centre of surgery and get most of the attention, any surgical procedure could not be possible without the valuable work and expertise of surgical technologists.

(9:00 - 9:18)

Conclusion And with that, we have come to the end of our video. We hope you found it informative and if you learned something today, then do comment down below what it was. Give us a thumbs up and don't forget to subscribe to our channel and also hit the notification bell so you can always be the first to watch our new content.

(9:19 - 9:24)

Watch more of our videos where we bring you the most exciting content. Until then, goodbye and see you later.