1.1 History of Resuscitation

from ancient times to pop culture

Source: Avramidis, S. (2012) Facts, Legends and Myths on the Evolution of Resuscitation. In: Avramidis, S. ed. The IAHSFF Book, International Aquatic History Symposium & Film Festival, Florida, USA: International Swimming Hall of Fame, 9th - 12th May, 2012. IAHSFF, pp.21-31.

A. Medieval Methods

- 1) Heat
- 2) Flagellation
- 3) Bellows
- 4) Bloodletting

B. Modern Era

1711	Fumigation Method
1770	Inversion Method
1773	Barrel Method
1803	Russian Method
1812	Trotting Horse Method
1847	Costal Elevation Method
1856	Marshall-Hall Method
1858	The Sylvester Method to Holger-Nielsen
1892	Van Lamborde's Method

Current Practice
1950
1973
1996
2000/2005/2010
Resuscitation Standards in Canada are set by
Who follow the
Resuscitation in the Media
A survey of survival rates on <i>ER</i> , <i>Chicago Hope</i> , and <i>Rescue 911</i> , shows that of patients were alive immediately after CPR. Reality is closer to **Ahronheim, Judith MD, "CPR on TV Isn't So Real"
Fantasy to 'Reality' to Drama Examples:

Baywatch

The Sandlot

Rescue 911

ER

Chicago Hope

Questions:

- 1) Why do you think it took so long to develop current resuscitation techniques?
- 2) What are some common myths or stereotypes about CPR? How/why do you think they have developed?
- 3) How do media images of CPR affect people's perceptions of it? Is this generally a good thing or a bad thing?
- 4) Investigate one other example of medical history that you find interesting, print it out or give the link for it, and write a one-paragraph summary.

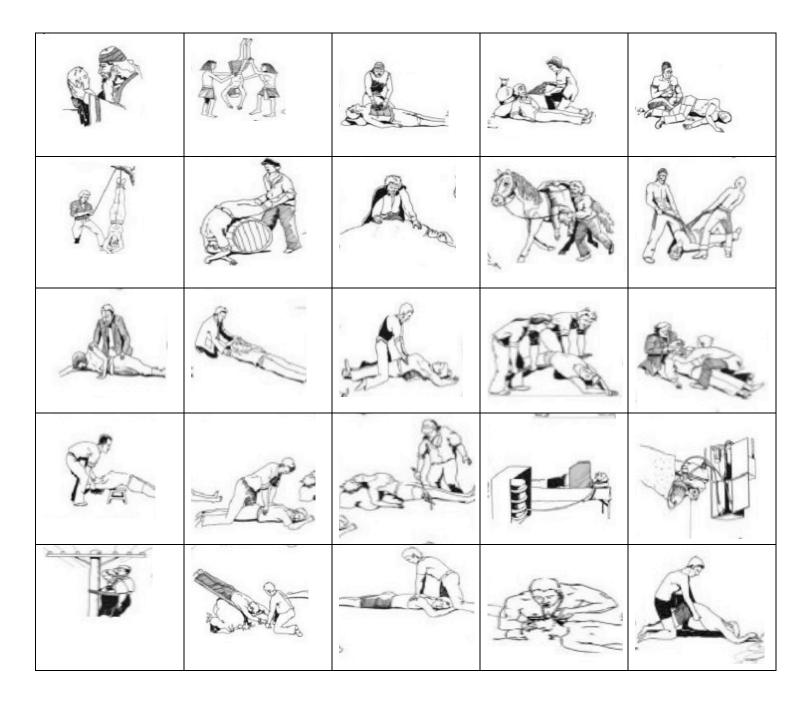
Unit 1: Resuscitation (teacher)

Intro: http://www.youtube.com/watch?v=IuYrRebvFHc

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1) Bible Times I Kings 17:17-22

2) Ancient Egypt

In ancient times, the treatment of the King of Chyryba took place. The treatment of King Aleppo is one of the preserved ancient resuscitation stories (see Vervaecke, 1997; Avramidis, 2010). The King was thrown into the Orontes River by the furious Egyptian Pharaoh Ramses II and almost drowned. In the Rameseum at Thebe the gravures of the rescue treatment given to the King by his soldiers are depicted. They lifted their King by his feet, probably to drain the water out of his lungs (Bierens, 1996; Meursing, 2006; Figure 2).

3) Ancient China

During ancient times, in China an effort to revive drowning victims was made. In particular, a method was used in which the victim was positioned on his stomach on the back of an ox. Both of his arms hung down on one side, and both of his legs on the other. The rescuer held the victim in this position while he brought the ox to a gallop (Bierens, 1996; Meursing, 2006).

4) Ancient Greece

In 700 BC, the theory of Pneuma dominated medical thinking in Greece. The Pneuma theory was postulated by some Greek philosophers: during their last breath, a casualty's Pneuma left their body, thereby achieving immortality. Based on this theory, drowning was considered to be particularly bad, since Galen postulated that during submersion, water obstructed the airway, preventing the Pneuma from leaving the body. Because of this, efforts were made to free the Pneuma after the victim was rescued (Meursing, 2006). Specifically, Hippocrates (460–370 BC) suggested in his work, Prognosticon, that a priest could blow the Pneuma back into the casualty's body by inserting a tube into the trachea (Bierens, 1996; Meursing, 2006).

Early Ages Heat Method

Hot ashes and coals were placed on the victim's chest in an effort to re-initiate breathing and heartbeat as well as to re-warm the patient. If the victim was only asleep, this procedure was remarkably successful.

Flagellation Method

The would-be rescuers would actually whip the victim in an attempt to stimulate some type of response.

¹⁷ Some time later the son of the woman who owned the house became ill. He grew worse and worse, and finally stopped breathing. ¹⁸ She said to Elijah, "What do you have against me, man of God? Did you come to remind me of my sin and kill my son?"

¹⁹ "Give me your son," Elijah replied. He took him from her arms, carried him to the upper room where he was staying, and laid him on his bed. ²⁰ Then he cried out to the LORD, "LORD my God, have you brought tragedy even on this widow I am staying with, by causing her son to die?" ²¹ Then he stretched himself out on the boy three times and cried out to the LORD, "LORD my God, let this boy's life return to him!"

²² The LORD heard Elijah's cry, and the boy's life returned to him, and he lived.

Bloodletting

1530 **Bellows Method**

This method was actually remarkably similar to current bagvalve-mask ventilation techniques. Unfortunately, not very many people carried a fireplace bellows with them.

1711 Fumigation Method

According to the literature, smoke was blown into an animal bladder, then into the victim's rectum. For some reason, this procedure was somewhat successful. Hence the expression, "smoke blown up..."

http://www.youtube.com/watch?v=6uEJbwGYaDs&feature=player_embedded#!

1770 Inversion Method

When a victim was rescued, the lifeguard would tie the victim's ankles together and attach the victim to the stanchion where the victim would be alternately raised and lowered

1773 Barrel Method

The rescuer would hoist the victim onto a large wine barrel and alternately roll him back and forth.

1803 Russian Method

The concept was to reduce the body's metabolism by freezing the body under a layer of snow and ice.

Trotting Horse Method

When a victim was rescued and removed from the water, the lifeguard would hoist the victim onto his horse and run the horse up and down the beach.

1847 **Costal Elevation Method**

This involved pushing on the bottom of the ribcage to force breathing.

1856 Marshall-Hall Method

Essentially, this involved rolling a patient from their side to their back repeatedly

1858 **The Sylvester Method**

In this approach, you would roll the patient onto their front and then pull their arms up to stimulate breathing Many variations on this method were introduced over the year, including the **Holger-Nielsen** method in 1932

1892 Van Lamborde's Method

This involved holding the patients' tongue and moving in and out to stimulate breathing

1950 **Mouth to Mouth Resuscitation**

1961 John F Kennedy Quote:

"within the next 10 years, United States would send a person to the moon and also cardio-pulmonary resuscitation would save thousands of lives"

1973 Cardio Pulmonary Resuscitation (CPR)

1990 **Defibrillation**

1996 **Automatic External Defibrillators (AED)**

2000/2005/2010 Each country revises CPR procedures every 5 years according to the latest research from ILCOR.

Canadian Heart and Stroke Foundation is responsible for setting CPR standards in Canada, but they just follow the American Heart Association Guidelines.

Ahronheim, Judith MD, "CPR on TV Isn't So Real"

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Baywatch http://www.youtube.com/watch?v=xsp83S8CYL8
The Sandlot http://www.youtube.com/watch?v=vr5lHZQz-Z4
Rescue 911 http://www.youtube.com/watch?v=gb7Nfra91fs
Chicago Hope http://www.youtube.com/watch?v=Bj1bmEV3G4o
Third Watch http://www.youtube.com/watch?v=AID-r7mq6rw

A survey of survival rates on *ER*, *Chicago Hope*, and *Rescue 911*, shows that 77% of patients were alive immediately after CPR. Reality is closer to 2%.

Questions:

What are some common myths or stereotypes about CPR? How/why do you think they have developed?

How do media images of CPR affect people's perceptions of it? Is this generally a good thing or a bad thing?