Passion and Pain

The Story of Dr. Ignaz Semmelweis

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SARAYA
PUERPERAL FEVER (PF)

- Deadly scourge of lying-in women for centuries
- Hippocrates viewed PF as inevitable and fatal
- In 17th and 18th centuries, hospital epidemics like PF were common and killed 2/3rds of women who died in childbirth
- PF took greatest toll among working-class women because they were more likely to deliver babies in hospital; middle- and upper-class women delivered at home
PUERPERAL FEVER (PF)

- Historically, attributed to causes such as:
  - Atmospheric conditions
  - Emotions
  - Hysteria
  - Poisons of menstrual fluid
  - Imbalance of the four humours
  - God’s vengeance

- Known today as caused by group A streptococcus, an infection which can manifest in many ways:
  - Strep throat
  - Scarlet Fever
  - Rheumatic Fever
Dr. Semmelweis

• Born in Budapest, Hungary in 1818

• Obstetrician and scientist

• In 1846, joined staff at Vienna Lying-In Hospital
• Noted discrepancy in death rates among women attended by physicians (first clinic) and those attended by midwives (second clinic)

• Tested several hypotheses (e.g., location of laboring women, size of hands of physicians/midwives, position of women during birthing)
A medical colleague died of sepsis (identical to PF) after being inadvertently stuck with a sharp instrument during an autopsy.

Semmelweis recognized that PF was transmitted through contact with this autopsy material.

This led to the realization that PF was directly transmitted from one individual to another.
Semmelweis mandated that all physicians soak their hands in chlorinated lime after performing an autopsy and before examining an antepartal woman.
THE PUSHBACK: POLITICAL REASONS

Despite dramatic results, his work was not widely accepted.

- **Anticontagionism**: Belief that God would not allow disease from something that humans could not see.

- The medical community, steeped in tradition, was unwilling to change or take responsibility for causing disease.
The Germ Theory, that specific microscopic organisms are the cause of specific diseases, was not established until several decades later.

Semmelweis did not publish his findings for 13 years.
THE PUSHBACK: INTERPERSONAL REASONS

- Semmelweis was tactless, single-minded, and fanatical

- He was a foreigner in Vienna and spoke poor German

- He alienated the medical establishment by lashing out against his critics in bitter and offensive open letters
THE END OF SEMMELWEIS’ LIFE

• He lost his medical position, was paranoid, drank heavily and displayed erratic behavior.

• Committed to a mental institution in 1865, where he died two weeks later, probably beaten to death by attendants.

• Cause of his mental condition was uncertain, possibly Alzheimer’s disease, stress and overwork, or tertiary syphilis.
A TRAGIC ENDING...WORTHY OF AN OPERA
Despite the pain, resistance and hostility of the medical profession and the public, hand hygiene became a fundamental principle of infection prevention by the early twentieth century.

This 1932 paper was published in the same year that NYAM held its first convening on maternal mortality.
THANK YOU AND ENJOY THE SHOW!

Data from Larson El. Innovations In Health Care: Antisepsis as a Case Study.