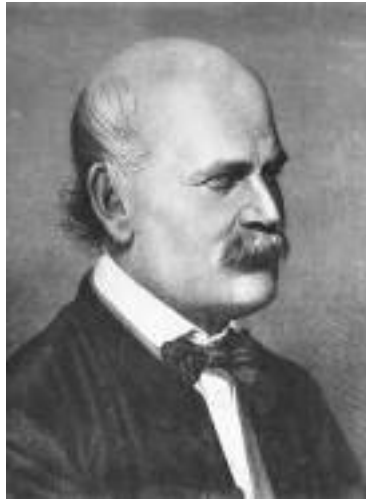


Ignaz Semmelweis

No-One Thanked Him

By: Dennis Brindell Fradin



Ignaz Semmelweis was a Hungarian obstetrician who disproved the belief that post-operations deaths were caused by 'poison air' in a hospital ward. The work done by Semmelweis all but removed puerperal fever from the maternity units he worked in. His colleagues and superiors derided his work while he was alive but antiseptic surgery drastically reduced post-operation fatalities.

Ignaz Semmelweis was born on July 1st 1818 near Budapest. His father was a wealthy wholesale grocer. In 1837 he studied Law at the University of Vienna before changing to Medicine in 1838. In 1844, Semmelweis was awarded a doctorate in Medicine. At the end of his training Semmelweis decided to specialise in obstetrics. His first medical position came in 1846 when he was appointed as an assistant in a maternity ward at Vienna General Hospital.

The number of young mothers who died in the ward after giving birth immediately struck Semmelweis. In the first month that he worked in Maternity Ward No 1, 36 women out of 208 died – a 17% fatality rate. He learnt that Maternity Ward No 1 had a poor reputation outside the hospital as the one in which you, as a young mother, had the greatest chance of death when compared to Maternity Ward No 2. Services at the hospital's maternity wards were free and they served the city's less well-off women. However, Semmelweis learnt that women would rather give birth in the streets around the hospital rather than be admitted to Ward No 1 and that they had a better chance of survival.

The explanation he was given by experienced workers in the ward was that the women were victims of a 'poisonous gas' that had got into the ward. This was a very commonly held belief and one that had been around for many years. This 'miasma' was invisible and for some fatal.

Semmelweis was not prepared to accept such a belief and he spent time researching the issue. He found that in 1846, 451 women had died in Maternity Ward No 1 after giving birth but in the nearby Maternity Ward No 2 only 90 women had died. Semmelweis would not accept that somehow the miasma that was so destructive in Ward No 1 did not get to the corridor of Ward No 2 that was close by and more crowded. He believed that there had to be another reason.

Semmelweis believed that cause of so many deaths in Ward No 1 was the nearby post-mortem room. Ward No 1 was the preserve of doctors and trainee doctors while Ward No 2 was where only midwives learned their profession. At the Vienna General Hospital it was very common for obstetricians to carry out autopsies in the morning and then carry on with their other work in Ward No 1 after that. Midwives did not do autopsies.

Semmelweis believed that there had to be a link between the work done in the post-mortem room and the obstetricians coming into Ward No 1. On the one hand the hospital had a maternity ward next to a post-mortem room and in that ward post-birth deaths were high. On the other hand, the hospital had another maternity ward which was staffed by midwives who did not go into the post-mortem room and in that ward post-birth deaths were much lower.

In 1847 a colleague of Semmelweis, Jakob Kolletschka, died from septicaemia. He had been cut with a scalpel during an autopsy. Semmelweis attended his colleague's autopsy and noticed that the lesions on his body were very similar to those on many of the women who had died in Ward No 1. Semmelweis believed that it had been the scalpel that had transferred the 'miasma' from the corpse to his former colleague.

Semmelweis ordered that all medical staff in Ward No 1 had to wash their hands in chlorinated lime before visiting a patient and that the ward itself had to be cleaned with calcium chloride. The mortality rate in Ward No 1 dropped dramatically and by 1849, just 2 years after the death of his colleague Kolletschka, death from 'miasma' had all but disappeared.

Semmelweis provided his evidence to the medical elite of Vienna. He stated that cleanliness was the way to defeat 'poison air' and backed this up with the statistics he had gathered. His views were not part of the general medical beliefs of the time and he was immediately attacked by most senior medical figures – three did support him but none of them had a background in obstetrics. Semmelweis was dismissed from his position at the Vienna Krankenhaus and went to live in Budapest.

In Ward No 1, doctors went back to their old ways and fatality rates immediately increased to their level pre-1847.

Semmelweis gained employment at the St. Rochus Hospital in Budapest and applied his findings there. The death rate in the maternity units there dropped drastically.

In 1861, Semmelweis published 'Die Aetiologie, der Begriff und die Prophylaxis des Kindbettfiebers' (Etiology, Concept and Prophylaxis of Childbed Fever) – “which stands as one of the epoch-making books of medical history.” (History of Medicine by Roberto Margotta)

The work was filled with a mass of statistics and proved difficult to read. It was met with hostility by the medical profession and many simply mocked its findings. It took another twenty years before his findings were universally accepted. For years many of Europe’s leading medical practitioners believed that childbed fever was a disease of the bowel and that purging was the best medicine for it.

The years of rejection by his colleagues in medicine almost certainly took its toll on Semmelweis. He suffered from severe depression and may have suffered from premature dementia as he became very absent-minded and when in public invariably turned all of his conversations into ones concerning childbed fever. After the effective rejection of his 1861 work on puerperal fever he wrote a series of 'Open Letters' to his main critics in which he openly called them “ignorant murderers”.

In 1865 he was tricked into visiting a mental asylum. When he tried to leave Semmelweis was forcibly restrained and put in a strait jacket. The injuries were such that they became infected and he died two weeks later.

Ignaz Semmelweis died in 1865. He was buried in Vienna. Very few people attended his funeral. In 1891, his body was transferred to Budapest. A statue was only erected to him and his achievements in 1894, nearly thirty years after his death

