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STRESS FROM HEALTH CARE AND IATROGENIC INJURIES

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The practice of medicine has always been recognized to be a two-edged sword that can have serious risks as well as significant rewards. Hippocrates' warning to physicians, "First, do no harm" (*primum non nocere*) is the prime precept of medical ethics, and illness due to a healer's avoidable error has been a punishable offense in some civilizations. While advances in medicine and surgery over the past 150 years have sharply reduced morbidity and mortality, they have also given rise to new diseases and disorders that can be just as dangerous and deadly. **Iatrogenic disease due to medical mistakes is now the leading cause of death.**

Also Included In This Issue

Such errors can occur even when health care workers adhere to accepted or recommended practices that are subsequently demonstrated to be harmful. It may take decades for beneficial breakthroughs to be implemented because of resistance from physicians who refuse to even consider that they could actually cause or contribute to any disease. An especially egregious example is puerperal (Latin *puer*, child) or childbed fever, a major cause of maternal death in the 1800s.

Average mortality rates ranged between 20% and 25% for all women giving birth, with occasional epidemics close to 100% for those in some maternity wards. Autopsies showed so many confusing and varied findings that it was believed to be not one, but several different diseases, that had not yet been identified. Theories about possible causes were strongly influenced by Galen's belief that all diseases were due to dyscrasia from a

disturbance in the balance between the four humours (Greek *dyskrasia*, bad mixture). Medical texts emphasized that each case of puerperal fever was unique and due to an excess or deficiency of a specific humour. The main treatment was bloodletting or applying leeches to revitalize the circulation in the lower pelvic area, since it was thought that fever was due to stagnated blood. The higher the fever, the greater the amount of blood that had to be drained. In general, 15-30 ounces were removed in each treatment, unless the patient fainted first. Other therapies included cupping to remove blood, purging, vomiting, starving, and other vain attempts to reduce the fever.

The Sad Saga Of Ignaz Semmelweis And Pompous Physicians

In 1843, Oliver Wendell Holmes published *The Contagiousness of Puerperal Fever*, which proposed that puerperal fever was frequently carried from patient to patient by physicians and nurses. Holmes suggested that hand-washing, clean clothing, and avoidance of autopsies by those assisting in births would prevent the spread of the disease. He wrote "In my own family, I had rather that those I esteemed the most should be delivered unaided, in a stable, by the manger side, than that they should receive the best help, in the fairest apartment, but exposed to the vapors of this pitiless disease." Others had previously expressed similar views. Alexander Gordon, a Scotch physician, suggested in 1795, that the fevers were contagious processes, that physicians were the carrier, and that "I myself was the means of carrying the infection to a great number of women." Thomas Watson, Professor of Medicine at King's College Hospital, London, wrote in 1842: "Wherever puerperal fever is rife, or when a practitioner has attended any one instance of it, he should use most diligent ablution."

Watson recommended hand washing with chlorine solution and changes of clothing for obstetric attendants "to prevent the practitioner becoming a vehicle of contagion and death between one patient and another." All these suggestions fell on deaf ears. And despite this support from others and his stature as a prominent physician, first Dean of Harvard Medical School and popular author, Holmes was ridiculed by his contemporaries, including a leading obstetrician, who stated, "Doctors are gentlemen, and gentlemen's hands are clean." However, those criticisms pale in comparison to the scorn and derision heaped on Ignaz Semmelweis, who conclusively proved that Holmes and other physicians were correct in placing the cause of puerperal fever in the hands of physicians, literally as well as figuratively.

Semmelweis was a Hungarian physician who received his doctorate from the University of Vienna in 1844. In 1846, he was appointed assistant to Professor Johann Klein to oversee one of the two obstetrical clinics at Vienna General Hospital. His duties were to examine patients each morning in preparation for Klein's rounds, supervise difficult deliveries and teach

obstetrical students and interns, much as a Chief Resident would do today. Similar maternity clinics had been established throughout Europe to address the problem of infanticide in illegitimate or unwanted children. These provided free obstetrical services and infant care in return for expectant mothers agreeing to assist in the training of doctors and midwives. It was a very attractive arrangement for prostitutes, unmarried, and very poor women. Many had no alternative but to abandon their babies, or try to abort themselves or find someone to do it, which was notoriously dangerous.

There were two such maternity clinics at the Vienna Hospital. The *First Obstetrical Clinic*, where Semmelweiss had been assigned, had a 10% or more mortality rate from puerperal fever, in contrast to 4% at the *Second Obstetrical Clinic*. Since each clinic admitted patients on alternate days and this marked difference in death rates was well known, desperate patients did whatever they could to not be admitted to the *First Clinic*. Semmelweis was very disturbed by plaintive pleas from women who begged him on their knees to be admitted to the *Second Clinic* even though it was not the correct day. Many preferred to deliver at home and then pretend they had given sudden birth on the way to the hospital. Under the law, such "street births" still allowed them to receive infant care benefits. He was very perplexed and puzzled as to why puerperal fever was relatively rare in women with "street births", compared to the *First Clinic*. And why did his *First Clinic* have more than twice as many deaths as the *Second Clinic*? Both used identical practices and techniques, and he wrote that the high mortality rates "made me so miserable that life seemed worthless". In an attempt to find some answers, he meticulously eliminated all possible differences, including dietary and religious practices as well as differences in air quality due to crowding and poor ventilation. At the time, disease was thought to be spread by "bad air," but the *Second Clinic* was always more crowded because it was known to be safer. The only significant distinction was that the *First Clinic* was the teaching service for medical students, while the *Second Clinic* had been selected in 1841 for the instruction of midwives only.

But why should that make a difference? The breakthrough occurred in 1847, when a close colleague who had been accidentally punctured by a student's scalpel while performing an autopsy, quickly developed a high fever and died. His autopsy revealed pathological changes very similar to those seen in puerperal fever victims. Semmelweis concluded that this was somehow related to the scalpel introduction of cadaverous material into the body. He reasoned that doctors, interns and students could also have carried "cadaverous particles" on their hands from the autopsy room to the patients they examined in the *First Obstetrical Clinic*. This might explain why the *Second Clinic* had much lower mortality rates, since the student midwives were not engaged in autopsies, and although they had no contact with

corpses, probably had other opportunities to contaminate their hands. Semmelweis was completely unaware that Holmes and others had previously suggested that doctors might be responsible for spreading the disease and had urged adopting preventive antiseptic measures. On May 15, 1847, he independently instituted a policy of vigorous hand washing with a solution of chlorinated lime (similar to Clorox) prior to examining patients, and particularly after performing autopsies. The mortality rate the previous month had been 18.3 %, but plummeted to 2.2% in June and 1.2% in July. In 1848, he widened the scope of his washing protocol to include all instruments coming in contact with patients in labor, and the mortality rate subsequently dropped to zero.

Despite his stunning success, Semmelweis' theory and suggestions were treated with skepticism and scorn in Viennese medical circles. Puerperal fever was believed to include several different diseases and the suggestion that all of these were due to lack of cleanliness seemed preposterous, especially since there was no evidence of "bad air." Although he was obviously much more qualified than the only other applicant, who had no obstetrical training, his contract at the hospital was not renewed in 1849 due to political pressure. He presented his findings to the Medical Society of Vienna in 1850, but they were refuted by the renowned pathologist Rudolph Virchow, as well as prominent obstetricians, including his own Professor Klein. The ridiculous notion that miniscule infectious particles on fingers or instruments could cause puerperal fever had absolutely no scientific basis, nor could Semmelweis offer any explanation. However, accounts of his achievements circulated around Europe after his students wrote to the directors of the leading maternity clinics and described what they had witnessed. One presented a lecture to the Royal Medical and Surgical Society in London that was published in *Lance*t in 1848. Another wrote a similar paper that appeared in an equally prestigious French journal the following year. The editor of a leading Austrian medical journal compared his breakthrough achievement to Edward Jenner's discovery that cowpox inoculations could prevent smallpox earlier in the century.

Semmelweis anticipated that his chlorine solution hand and instrument washing protocol would be widely adopted and that tens of thousands of lives would be saved. But this was decades before the germ theory of disease would be developed by Pasteur, Lister and Koch, and there was no scientific rationale to support his theory. In addition, since he had not published anything, the available information that came from others was often misinterpreted. A Scottish obstetrician wrote a stinging letter complaining that he was apparently completely unaware of the British literature on the subject, which had long considered childbed fever to be contagious, so this was nothing new. A British authority claimed that the

results simply confirmed that the disease was due to "bad air" from the autopsy room. Using the Semmelweis protocol, one of his former assistants, reproduced its remarkable success rate at two other Austrian maternity clinics. However, when the results of his studies were published in 1856, the journal's editor sarcastically commented that "it was time to stop the nonsense of hand washing with chlorine".

In 1858, in response to his critics, Semmelweis finally published his research in an essay entitled, "The Etiology of Childbed Fever" in 1858, and two years later, another one on "The Difference in Opinion between Myself and the English Physicians regarding Childbed Fever". Since neither seemed to have much of an effect, he published his main work, *The Etiology, Concept and Prophylaxis of Childbed Fever* in 1861, in which he complained about the rejection and failure to adopt his recommendations.

> Most medical lecture halls continue to resound with lectures on epidemic childbed fever and with discourses against my theories. The medical literature for the last twelve years continues to swell with reports of puerperal epidemics, and in 1854 in Vienna, the birthplace of my theory, 400 maternity patients died from childbed fever. In published medical works my teachings are either ignored or attacked. The medical faculty at Würzburg awarded a prize to a monograph written in 1859 in which my teachings were rejected.

This book generated many more responses, but most were critical and caustic. Carl Braun, Semmelweis's successor at the *First Clini*c, had contributed a chapter to a medical textbook in which he identified 30 causes of puerperal fever, including: problems arising during conception and pregnancy, uremia, pressure exerted on adjacent organs by changes in the uterus, emotional trauma, dietary mistakes, chilling, and atmospheric epidemic influences, with only one that could be attributed to cadaverous infection. He failed to mention that after he took over Directorship in the 1850's and hand washing was not enforced, mortality rates soared. A Berlin professor of obstetrics strongly approved of his students having close access to morgues to perform autopsies while waiting to be called for a delivery. [Obstetrics derives from the Latin verb *obstare*, "to stand by or wait.] A Prague obstetrician rejected Semmelweis's book as "naive", referred to it as "the Koran of puerperal theology" and insisted that factors other than decaying organic matter had to be considered. One from Budapest, who recommended purging, insisted that the disease resulted from uncleanliness of the bowel. The Director of the Copenhagen maternity hospital severely criticized the vague nature of miniscule and invisible "cadaverous particles", as follows, "If Dr. Semmelweis had limited his opinion regarding infections from corpses to puerperal corpses, I would have been less disposed to denial than I am. And, with due respect for the cleanliness of the Viennese

students, it seems improbable that enough infective matter or vapor could be secluded around the fingernails to kill a patient."

Embittered and frustrated, Semmelweis wrote a series of "open letters" to his critics, former professors and leading European obstetricians, accusing them of being "ignoramuses", "medical Neros" and "irresponsible murderers". This only infamed matters, since such personal attacks undermined his credibility. His public behavior also became embarrassing as he began to drink excessively, spent more time away from his family, and sometimes in the company of a prostitute. In July 1865, while the Semmelweis family was visiting friends, his actions were so inappropriate that it was feared he was losing his mind. A colleague wrote a document committing him to an insane asylum in Vienna and he was duped into going there by telling him it was a new maternity clinic. Semmelweis surmised the deception and tried to leave but was "severely beaten by several guards, restrained in a straightjacket and confined to a dark cell." His treatment included dousings with cold water and administering castor oil as a purgative. He died two weeks later from a gangrenous wound, most likely due to his beatings. An autopsy confirmed extensive internal injuries, but the cause of death was septicemia, or blood poisoning, and would have been called puerperal fever had he been a patient in a maternity clinic.

Semmelweis was buried in Vienna on 15 August 1865, but neither his wife, other family members, nor any of his colleagues attended the service. A few medical periodicals in Vienna and Budapest later included brief announcements of his death but nobody came forward to acknowledge his life and remarkable achievements. The Hungarian Association of Physicians and Natural Scientists rules specified that a commemorative address be delivered in honor of each member who died in the preceding year. There was no such address for Semmelweis and it would appear that his death was not even mentioned.

Surgeons Don't Need To Wash Their Hands Because They Are Gentlemen

In the 1850's, half of the patients who died after surgery also succumbed to postoperative infections. This happened so routinely, that "The operation was a great success but the patient died" became a common saying. As with puerperal fever, this was attributed to the miasmatic theory which held that diseases like cholera or the Black Death were caused by a miasma, (Greek for pollution) a poisonous form of "bad air." The miasmatic theory was supported by the observation that when measures were taken to drain or prevent the accumulation of stagnant water, air quality improved and the incidence of disease was significantly reduced. It was believed that exposed wound tissues were damaged by a foul smelling miasma because of the bad odor in wards with postoperative patients.

This also helped to explain why cholera and other epidemic diseases were much more common in countries and regions with malodorous areas caused by stagnant water. Various miasmas caused different diseases, which is how malaria (Italian *mala aria* or bad air) got its name. The illustration to the left depicts the spread of cholera by poisonous air during the 1849 epidemic.

A strong proponent of this theory was Florence Nightingale, the pioneering nurse known as the "Lady with the Lamp", because of her emphasis on insuring that dim and filthy hospital wards were thoroughly cleaned. She periodically let sunlight in and aired them to reduce the bad odors from infected wounds. Others recommended covering rotting tissues and postoperative surgical wounds as much as possible with thick bandages to reduce the "bad air" they emitted, which often did more harm than good. Although organisms in the exudates from infections could be seen under the microscope, they were not considered to be the cause of the problem. There were no antibiotics and deaths due to a variety of infections were common. It's not surprising that autopsy results in puerperal fever were confusing, since they differed for staphylococcal, streptococcal or coliform infections.

Less than a decade after Semmelweis' death, the famous Austrian surgeon, Theodor Billroth, isolated streptococci in postoperative wound infection exudates. Four years later, in 1879, Louis Pasteur cultured a hemolytic streptococcus from the blood of a woman with sepsis due to puerperal fever. Around the same time, Robert Koch, a German physician, isolated the specific bacteria that he unequivocally proved were the cause of anthrax, tuberculosis and cholera. The germ theory of disease finally had a solid scientific basis that could not be ignored. However, facilities for washing hands or the patient's wounds did not exist, since it was considered quite unnecessary for doctors to wash their hands before examining or operating on a patient. Some surgeons were insulted at this suggestion since their high social status guaranteed cleanliness. After all, surgeons were gentlemen, and gentlemen never had dirty hands since they wore white gloves.

Joseph Lister, a British surgeon had his doubts. He was familiar with the views of Holmes and Semmelweis as well as Pasteur's theory that bacteria could cause airborne infections. Pasteur had also published an article in a French journal showing that rotting and fermentation could occur without any oxygen if certain microorganisms were present. Lister confirmed that bacteria could cause gangrene with his own experiments and looked for ways to eradicate these harbingers of deadly infections. Pasteur had proposed three methods: to filter them out, heat them up, or expose them to strong chemical solutions. Since the first two could not be used for human wounds, Lister investigated possible alternatives. Carbolic acid was being used to deodorize sewage, so he tested the results of spraying instruments, surgical incisions, and dressings with varying strengths. In 1865, he found that swabbing a 5% carbolic acid solution on wounds and soaking bandages with it was well tolerated and markedly reduced the incidence of infections and especially gangrene. He washed all instruments in carbolic acid, and required that surgeons wore clean gloves and washed their hands before and after operations with his carbolic acid solution. Lister urged that the use of porous materials in manufacturing the handles of surgical instruments be stopped, since it might be difficult to kill bacteria in their deep inner recesses. He also developed a steam spray that could spread high concentrations of carbolic acid throughout the air in his operating room. (Many years later, Koch demonstrated that steam could similarly be used to sterilize surgical instruments and dressings.) Lister's postoperative infections plunged precipitously after introducing these antiseptic measures and he subsequently published a series of articles on "The Antiseptic Principle of the Practice of Surgery" that provided details in the September 21, 1867 issue of *Lancet*.

Like Holmes and Semmelweis, Lister's recommendations were also met with skepticism, suspicion and hostility, and it took decades for "Listerism" to be fully accepted. However, by the turn of the century, the necessity to maintain strict obstetric asepsis was firmly established and the leading 1905 textbook gave detailed instructions for the personal hygiene of physicians and nurses attending confinements as well as on the performance of internal examinations. The importance of "inculcating in the student the principles of obstetrical cleanliness, mechanical and chemical" was emphasized, particularly the need for meticulous antiseptic care during vaginal deliveries and manipulations. While surgeons were probably not wearing white gloves as often, many were wearing rubber ones when they operated. This practice was introduced in 1894 by William Halsted, the first Chief Surgeon at Johns Hopkins Hospital. He had hired the B.F. Goodrich Rubber company to manufacture thin gloves that would not interfere with the sensitivity required during surgery because his head scrub nurse and future wife had developed a severe dermatitis from the caustic chemicals that irritated her hands prior

to surgery. Others also adopted this practice for similar reasons and it was only later that their antiseptic benefits were fully appreciated. For many years, surgical gloves were washed, mended, powdered, sterilized and reused and it was not until the 1960's that they were replaced by disposable latex gloves. The problem was that up to 15% of health care workers who repeatedly wore them gradually developed latex allergies. In addition to local irritation, some had severe systemic symptoms, including fatal anaphylactic shock. In a twist of fate, Johns Hopkins became the first hospital to ban latex gloves earlier this year.

Although Lister also met with initial opposition, unlike Semmelweis, his achievements were widely acknowledged while he was alive. Listerine mouthwash and the bacterial genus Listeria were named in his honor. Listeriosis, a serious infection caused by eating food contaminated with the bacterium *Listeria monocytogenes,* has recently been recognized as an important public health problem in the elderly and patients with compromised immune function. He was elected President of the Royal Society, made a baronet, and became Queen Victoria's personal surgeon. In 1897, she gave him the title of Lord Lister, making him the first doctor ever to be elevated to the House of Lords. Everyone knows about Listerine, but few in the U.S. have ever heard of puerperal fever or Semmelweis. His reputation in Europe changed dramatically as the germ theory was increasingly accepted and his adversaries died, or even began to assert that they had supported him all along. Both Hungary and Austria now claimed him as their native hero and his remains were transferred to Budapest in 1891. In 1964, they were again transferred to a space in the garden wall of the house in which he was born. This was now hallowed ground that had been converted into an historical museum and library in his honor. Semmelweis University was established in Budapest, where he was referred to locally as "The Saviour of Women." Not to be outdone, Austria issued a postage stamp with his portrait in 1965 to commemorate the 100th anniversary of his death, and in January, he was featured on the new Austrian 50 Euro shown below.

Austrian Commemorative Stamp and 2008 50€ Gold Coin To Honor Ignaz Philip Semmelweis

Another legacy may be what has been referred to as "The Semmelweis Reflex". This is not a genuine neurological reflex, but rather a metaphor for instinctive behavior characterized by a knee jerk rejection of anything that contradicts established beliefs. Afflicted individuals distrust or even despise a new discovery or hypothesis that they don't understand, and automatically reject it. The tragic tale of Semmelweis is reminiscent of the fate of other medical pioneers who were also vilified because they questioned entrenched dogma, but were later vindicated. As the early 19th century German philosopher Arthur Schopenhauer noted, **"All truth passes through three stages. First, it is ridiculed. Second, it is violently opposed. Third, it is accepted as being self-evident."** In some instances, a new discovery may be considered to be so important and obvious, that adversaries may try to claim that they always supported it, or had even discovered it themselves. A new scientific truth rarely triumphs by convincing critics of its merit. More often, it is because opponents eventually die and are replaced by a new generation that is now familiar with it and embraces it.

Semmelweis died one month after his 46th birthday and never saw the fruits of his labors. What caused the mental and emotional disturbances that led to his fatal confinement to a second rate insane asylum is not clear. Some have suggested that it might have been due to Alzheimer's or the dementia seen in tertiary syphilis. This was a common disease of obstetricians who examined thousands of prostitutes and other syphilitic women at free clinics. However, there is little to suggest either diagnosis. It is much more likely that his emotional exhaustion and nervous breakdown were due to the severe stress of constant frustration from seeing his life saving proposals ignored and the absence of social support from colleagues and family.

Iatrogenic Disease Due To Pharmacracy And Fraud

Iatros means healer in Greek, and iatrogenic disease originally referred to unintentional illness caused by a physician. However, it now encompasses accidental errors made by anyone engaged in health care activities, particularly hospital personnel. As noted in a prior Newsletter, one study estimated that **there are over 800,000 iatrogenic deaths annually. That's the same as more than 7 jumbo jets, each carrying 300 passengers, crashing every day of the year, with no survivors.** While such a catastrophe would surely make national headlines, we rarely read or hear about iatrogenic deaths, since they occur throughout the U.S. and have become so commonplace that they are no longer news.

A 2000 study estimated that there were up to 284,000 hospital iatrogenic deaths a year from unnecessary surgery, medication errors, other mistakes, infections and adverse drug reactions. Things have not improved since then. About 2 million patients get hospital infections, two thirds of which are

resistant to previously effective antibiotics. **Almost 60% of staph infections are now drug resistant, compared to only 2% a few decades ago.** Some, like MRSA can be fatal within a few days, and the same holds true for "flesh eating" streptococcal infections. *Clostridium difficile*, previously regarded as a minor nuisance since it was so easy to eradicate, has also become a deadly infection. This usually happens in hospitals when antibiotics given for other disorders eradicate normal intestinal flora leaving the organism to flourish and produce toxins that cause severe diarrhea and damage colon cells. Some particularly virulent strains produce a very powerful toxin that can destroy the colon in a week. As its name implies, C. difficile is difficult to culture so that the diagnosis is delayed, and patients are given antibiotics to treat the diarrhea it causes, which worsens the problem. In one hospital outbreak that affected 1,700 patients, 33 had to have their colons removed and 117 died. Drug resistant infections now kill more Americans than breast cancer and AIDS combined. There is an explosion in multi-drug resistant tuberculosis in Russia and Asia and over a million/year die from drug resistant malaria, which is responsible for one in every five deaths in African children.

That's only the tip of the iceberg since the vast majority of adverse drug side effects and medical errors are never reported. Moreover, mortality figures are only a fraction of the patients who survive iatrogenic death, but may be permanently injured or disabled. In many, if not most instances, such deadly or harmful results happen despite the fact that physicians are adhering to usual or recommended practices that eventually are found to be the cause of the problem. **Several studies have shown that when physicians go on strike, deaths and hospital admissions promptly decrease.** One explanation for this may be that patients are being over medicated or treated inappropriately due to deceptive drug promotions to doctors that hype the benefits and minimize or omit serious side effects. The same holds true for TV ads that are allegedly for educational purposes but are essentially "advertorials." Direct-to-consumer drug advertising is banned in other countries because of this, and its ability to convert healthy people into patients by exaggerating the seriousness of trivial complaints or the consequences of normal aging, such as erectile dysfunction.

This medicalization of America is a manifestation of "pharmacracy," a term coined by the psychiatrist Thomas Szasc, because, "while we have words to describe medicine as a healing art, we have none to describe it as a method of social control or political rule." One might also add that over the past seven decades, medicine has progressively become more of a profit driven business than a profession dedicated to promoting health. Szasc is particularly critical of psychiatrists and pharmaceutical companies that have created epidemics of bipolar disease, ADHD, autism and other emotional

disorders in children to promote the sale of powerful psychotropic medications. **In many instances, these expensive drugs have not been approved for use in this age group; are given as cocktail combinations that include other drugs even though their interactions have not been studied; some are contraindicated; and others are required to reduce serious side effects.** The criteria for these diagnoses are created by psychiatrists with strong financial ties to pertinent drug companies. Some are now being investigated because of millions of dollars in illegal kickbacks in addition to funding for their biased research.

It is difficult to overestimate the power drug companies have over the media, academia, medical education, as well as the FDA and other regulatory authorities. A prime example of iatrogenic disease due to "pharmacracy" and fraud is the large number of drug recalls in the past decade due to deaths. In many instances, drug company employees were on FDA approval committees despite regulations prohibiting this. In others, drugs were approved over the objections of a majority of the committee. This is reminiscent of Ivan Illich's premise that it is the nature of most institutions and organizations to eventually end up by performing in a manner that is the opposite of their original purpose because of corruption and greed. This inevitably followed when they became more powerful and particularly when they were governed by a self-perpetuating hierarchy with little external regulation. In his opinion, medicine was a perfect example.

> "Within the last decade medical professional practice has become a major threat to health. Depression, infection, disability, dysfunction, and other specific iatrogenic diseases now cause more suffering than all accidents from traffic or industry. Beyond this, medical practice sponsors sickness by the reinforcement of a morbid society, which not only industrially preserves its defectives, but breeds the therapist's client in a cybernetic way. Finally, the so-called health-professions have an indirect sickening power—a structurally health-denying effect. I want to focus on this last syndrome, which I designate as medical Nemesis. By transforming pain, illness, and death from a personal challenge into a technical problem, medical practice expropriates the potential of people to deal with their human condition in an autonomous way and becomes the source of a new kind of un-health." Illich I. Medical Nemesis. *Lancet* **1974**

The situation has seriously worsened since 1974. And, like Semmelweis, opponents fighting to restore truth and integrity are still persecuted by powerful vested interests. However, help may be coming - so stay tuned!

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