The Effect of Darwinism on Modern Medicine Dr. Jonathan L. Grantham, M.D.

Prague, Czech Republic October 2006

I swear by Apollo Physician and Asclepius and Hygieia and Panaceia and all the gods and goddesses...that I will fulfill this oath and this covenant.

Hippocratic Oath - Classical Version

I swear to fulfill, to the best of my ability and judgment, this covenant.

Hippocratic Oath - Modern Version

From earliest recorded times man has recognized the link between healing and spirituality. The Jewish priest and Indian shaman were strictly reliant on God or the spirits to heal. However, even though Greek medicine relied on scientific theory as its basis, as witnessed above the individual physician acknowledged the power of a higher authority. From the 2nd through the 18th century and into the mid-1800's medicine was guided by Christian morals and ethics, with an emphasis on spiritual well being and concern for the sick and the poor.¹ A significant paradigm shift occurred with the publication of Darwin's "The Origin Of Species By Natural Selection". As the title implies, a theory was proposed which removed the need for God as creator. Science trumped theology, and scientific became synonymous with valid.^{2,3} While Darwinism had profound effects across all the sciences, in medicine it had a number of dramatic deleterious consequences, both direct and indirect.

The most obvious direct effect is due to the concept of vestigial organs in the human body. A vestigial organ is defined an one "that is functionless and generally reduced in size but bears some resemblance to the corresponding fully functioning organs found in related organisms."⁴ There were once felt to be approximately 180 vestigial organs in the body, with the best known being the appendix.⁵ Though it is now known that all the body's structures serve some purpose and there are no true vestigial organs, in the past it was the standard of care to remove any "vestigial" organs that became diseased or damaged. Due to the remarkable amount of duplication of function present in the human body, usually no discernable damage occurred because of this practice. There was, however, one notable exception.

The meniscus is a C-shaped cartilage located between the articular surfaces of the femur and tibia. There are two in each knee, one medial and one lateral. It is now known that the meniscus is the main shock absorber for the knee, decreasing knee joint forces anywhere from 50-90% depending on the amount of flexion,⁶ but until the early 1980's it was felt to be vestigial. Consequently, prior to the 1980's, if the meniscus was damaged in any way, it was removed completely. Studies have shown that 20% of patients develop severe osteoarthritis of the knee within three years after meniscectomy, and all patients showed advanced radiographic changes within twenty years.⁷ People in their thirties and forties were presenting with arthritis signs and symptoms usually only seen in patients in their seventies or eighties. Due to an invalid evolutionary concept, tens and probably hundreds of thousands of people worldwide developed severe premature arthritis of the knee at an untold emotional, economic and social cost.

Darwinism had a more subtle, insidious effect on the doctor/patient relationship. As seen in the classical version of the Hippocratic Oath , for centuries there has been a recognized link between the practice of medicine and spirituality. This was developed even further as Christianity became the dominant religion in Europe and subsequently the United States. Christianity introduced the concept of agape love, or sacrificing for the good of others, and this attitude came to define the doctor/patient relationship.⁸ While the causes and therefore the appropriate treatments of most conditions were not

known until recent times, the caring and compassion exhibited by health care providers was considered paramount in the healing process. In fact, as much attention was likely to be paid to the patient's spiritual condition as to their physical well-being.⁹

However, as mentioned previously, Darwinism removed the need for God as an explanation for the natural world and created a chasm between science and all other disciplines. Science became paramount, and that which could not be quantified was considered to be of less importance.¹⁰ Modern medicine "evolved" into a sterile profession where science and technology supplanted care and compassion.

Recent studies have begun to reverse this trend. Researchers have examined the correlation between religious beliefs and such health outcomes as disease morbidity, recovery from injury, and mortality rates in the general population.¹¹ In the last several years over 1200 studies examining these issues have been performed, with a link between faith and a positive health benefit seen 75-90% of the time.^{12,13,14} In fact, in a meta-analysis performed for the NIH, epidemiologist Lynda Powell found that people who regularly attend church have a 25% reduction in mortality compared to non-church goers after correcting for all other variables.¹⁵ The data is so overwhelming that over half of the medical schools in the United States now make courses on spiritual health part of their curriculum, and the Joint Commission on Accreditation of Healthcare Organizations has mandated that hospitals add spirituality as a nursing diagnosis for patients.¹⁶ It's ironic that the scientific method, which contributed to the removal of religion from medicine, has been instrumental in its return.

Without doubt the most serious consequence of evolutionary theory on medicine was the application of the concept of natural selection in Nazi Germany. In 1895 Dr Jost, a German psychologist, published a paper advocating the right to medically assisted suicide for the terminally ill. In the case of mental incapacity the right to choose would revert to the state and incurability was deemed sufficient to justify death.¹⁷ Little attention was given to the idea at the time. However, after World War I Germany was undergoing a terrible economic depression, and resources were extremely limited. The Nazis, who had recently come to power, believed in the concept of Social Darwinism. They felt that to restore Germany to prominence it was necessary to cleanse society of "undesirables", thereby achieving a "Master Race". They seized upon Dr Jost's strategy, using the miserable economic conditions and scarcity of resources as the rationale and utilizing German psychiatrists and hospitals to implement their plan. Initially, those patients with such conditions as schizophrenia and mental retardation were forced to undergo sterilization procedures, but as the program progressed, two changes occurred. First, the definition of mental illness became skewed. In addition to cognitive impairment, difficulty assimilating to society was considered evidence of impairment. According to J.E Meyer "mentally defective, asocial, and inferior were used as almost identical terms." At one point 60% of the population was diagnosed with some form of mental illness. Secondly, as time went on the program progressed from one of compulsory sterilization to elimination. By the end of World War II over 350,000 people had been "euthanized" and this program became the precursor for the Holocaust.¹⁸ Because of the misapplication of Darwin's theory certain members of the German medical community became collaborators in genocide.

"The Origin of the Species" is one of the seminal works in the history of science. Its influence has extended far beyond the field of anthropology until it has become ingrained in the public consciousness. The concepts both stated and implied in Darwin's original work have had profound effects throughout society, including the field of medicine. While the impetus to better understand and either prevent or treat illness has been a boon to mankind, there have been several unforeseen consequences of this movement. From a physical/spiritual disconnect, through improper procedures based on faulty concepts, to the use of the theory of natural selection to justify murder, Darwinism has numerous significant negative effects on the practice of medicine.

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