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### HISTORY OF MEDICINE

#### The American Medical Association on the Ethics of Vivisection, 1880-1950

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##### Abstract

The American Medical Association (AMA) was a major player in debates about vivisection in the late 1800s to mid-1950s. This article provides an overview of arguments and guidelines the AMA once offered in favor of the practice in 1909.

##### Vivisection and Allopathic Medicine

Live animal experimentation, or vivisection, has existed since ancient times, and debates over its ethical implications in health care were considered in the United States in the 1860s,<sup>1</sup> when allopathic medicine was becoming more popular but struggling to establish and maintain credibility. Medical professionalization happened to coincide with the rise of a burgeoning and controversial animal protection movement. The American Medical Association (AMA), as the face of organized, scientific medicine, was a major player in vivisection debates, especially from the late 1880s to the mid-1900s. Not only did the AMA argue in favor of vivisection, but it also created guidelines for ethical conduct in animal experimentation to promote human health.

##### “Blessed” Work?

An entirely new construct of the field of medicine and how it should be practiced was being created in the late 19th century on the basis of empirical evidence (which necessitated experimentation on animals), and, because the field of medicine was largely unregulated at the time (this was the era of the “snake oil” salesman), the public initially viewed these changes, and physicians who practiced vivisection, with concern.<sup>2</sup> The fact that vivisection, at a time of growing awareness of **animal welfare**, was a part of this professional transformation only added to the controversy. Antivivisection activists organized around the principle that cruelty to animals was immoral. They believed that the practice would lead to a slippery slope of cruel acts and would deform the moral character of not just the physicians performing experiments, but of society in its entirety.<sup>2</sup> As Bates has argued, “Vivisection was seen as different from other forms of cruelty, such as the mistreatment of farm and draught animals, partly because those responsible were linked with the healing and academic professions, whose morality was supposed to be beyond reproach, and also because it had implications beyond animal welfare: for the way society made ethical choices, for how science should be conducted, and for how humans saw themselves in relation to the rest of creation.”<sup>2</sup>

The vivisection debate was the AMA's first real test: could it bring the public and the policy makers along on its journey to change the face of medicine with some degree of moral authority? By the late 19th century, antivivisection was a *cause célèbre*, bringing together disparate members of society to garner mainstream support, despite vivisection accounting “for only a tiny fraction of the vast amount of suffering inflicted on animals by human hands,”<sup>2</sup> a fact the AMA frequently invoked.

### **AMA's Ethical Defenses of Vivisection**

Beginning in the 1880s, the AMA created numerous committees and councils devoted to defending the practice of animal experimentation from restrictions that would “be an injury and hindrance to the pursuit of medical knowledge and the improvement of the medical art.”<sup>3</sup> In response to a particularly intense period of antivivisection activity beginning in 1908, the AMA formed the Council on Defense of Medical Research.<sup>4</sup> Its aim was “first, investigating the conditions of animal experimentation and the opposition to it; second, taking precautions against abuse of animal experimentation and against misconceptions of the conditions and purposes of medical research; [and] third, diffusing information regarding laboratory procedures and the results of laboratory study of disease.”<sup>5</sup> In order to combat the claim that students were operating on animals in private places outside of proper supervision, it also advocated “that teachers of the medical sciences speak to students concerning the importance of the experimental method in medical research ... the desirability that every care be taken to obviate discomfort and pain in using animals for research and instruction, and the urgent necessity that students avoid any act or word that would tend to rouse a feeling against the humane use of animals for educational and research purposes.”<sup>5</sup>

In order to accomplish its third goal, the Council created a series of pamphlets on the importance of vivisection to various medical breakthroughs, such as “Vaccination and Its Relation to Animal Experimentation” (Jay Frank Schamberg, 1911) and “The Fruits of Medical Research With the Aid of Anesthesia and Asepticism” (Charles W. Eliot, 1910).<sup>6,7</sup> These pamphlets (as well as mainstream magazine and newspaper articles authored by members of the Council) also pushed back against the idea that vivisection was immoral and cruel. The documents focused primarily on the following points.

*Western religions and customs allow for the belief that man's dominion over animals is absolute.* A 1909 pamphlet says of Western religion, “Most widely prevalent—and sanctioned at one time or another by religious practices among all peoples—is the view that man is the overlord of the animals and may use them for his pleasure and profit, even to the point of robbing them of life.”<sup>8</sup> The author posits that though Buddhists may believe in transmigration of souls, this is so uncommon a belief in the American context as to be “non-existent.”<sup>8</sup> A 1949 *Hygeia* article is similarly explicit, stating: “Religion approves it. We are to use the beasts of the field.”<sup>9</sup>

*Animals themselves benefit from the practice.* These “chain of being” arguments based on Christianity not only were used to defend the practice of vivisection but also were reflected in the language used by the AMA and other physicians when describing the benefits of experimentation to the animals themselves. In “The Role of Animal Experimentation in the Diagnosis of Disease,” Dr M. J. Rosenau contends that in having a more exact knowledge of the causes and channels of infection and disease in “lower animals,” we are also able to create more intelligent and humane efforts to conserve the health and comfort of our livestock.<sup>10</sup> The literature abounds with examples of animals saved by experimentation, from cows with bovine tuberculosis to dogs with rabies. An

example from 1941 asserts that “Animals which otherwise would have been left to roam the streets to starve and to be found, as they are often found, lying dead from motor vehicle accidents, make their contribution under ideal circumstances to the advancement of the science of care of animals and man.”<sup>11</sup>

*Laws and customs of the US allow for the use of animals for personal pleasure.* The AMA argued that a society that fails to condemn meat eating, wearing leather, castrating farm animals, and so on would be hypocritical to deny using animals for the most valuable human purposes. A 1915 pamphlet states: “If experiments on animals must be prohibited let the same law prohibit castration of animals and the dehorning of cattle.”<sup>12</sup>

A similar line of argument was that if one believes that choosing the life of a human over that of an animal is ever justified, then the moral argument is finished, and the only thing left to discuss is under what circumstances. The psychologist James Rowland Angell’s pamphlet contends that while those who believe no animal life can or should be sacrificed to save a human life cannot be reasoned with, this belief is not shared by most people or even most antivivisectionists. Accordingly, the only problem remaining is “determining the circumstances and conditions which warrant particular forms of the method.”<sup>8</sup>

*Physicians are morally above reproach.* The medical establishment also promoted the idea that medical practitioners have, by the very nature of their chosen profession, devoted their lives to easing suffering and are therefore assumed to be moral and compassionate. In 1896, the AMA adopted a resolution condemning legislation to restrict the practice of vivisection. In it, the delegates note that even to consider these laws “is an unjust reflection upon the humanity of those engaged in animal experimentation.”<sup>13</sup> Physicians and their allies proclaimed that physicians are “normal men, not at all lacking in the ordinary feeling of humanity, quite as merciful as the average non-medical man of the educated class.”<sup>14</sup>

*It is not practical or desirable in medical practice to harm animals.* It is not in the medical establishment’s interest to **harm the animals unnecessarily**, both from a moral and a scientific perspective. In his 1910 pamphlet, Dr W. W. Keen states: “I have seen their experiments, and can vouch personally for the fact that they give to these animals exactly the same care that I do to a human being. Were it otherwise their experiments would fail and utterly discredit them.”<sup>15</sup> Dr Samuel S. Maxwell explains: “The experimenter, even if he were really cruel, would usually defeat his own ends by the infliction of pain.”<sup>15</sup>

*It is the duty of every American physician to save American lives.* Not only did the AMA believe it was the responsibility of medical professionals to ensure the health of the human race using the best means at their disposal, but it also argued that during times of war it was downright unpatriotic to work against their efforts. In response to the American Red Cross’ refusal to take a position on animal experimentation during World War I, the AMA reaffirmed its belief in the importance of vivisection and that “the necessity for such animal experimentation is greater and more urgent at this time than ever; and that those who interfere with it in any way, thereby interfere with the conduct of the war and fail in the gratitude owing to our defenders.”<sup>16</sup>

In the 1940s, this argument was reused. Then-AMA President Herman Louis Kretschmer wrote an article in *Hygeia* essentially accusing antivivisectionists of hindering war

efforts. He wrote: "Several times, right in the midst of the war effort, some of the physicians of Chicago have had to interrupt their teaching and research work because of the pernicious activities of the antivivisectionists." He went on to say that "many of the splendid results achieved in the treatment of casualties in this war would not have been possible [without vivisection]."17

*Sacrificing a "lesser good for a greater good and encountering a moderate evil to escape a greater evil"*<sup>9</sup> is morally just. A 1910 pamphlet, referencing pioneers in the field of medicine, put forth this question: "Who is the more cruel: Dr. Carrel, in devising this life-saving method of transfusion of blood by experimenting on two living dogs, and saving . . . already, and even thousands in the future; or the women who would shackle him, shut up the Rockefeller Institute and thrust these poor patients into their graves? Does not the work of Drs. Flexner, Jobling and Carrel and their assistants not only justify the existence of the Rockefeller Institute, but also bid us tell them Godspeed in their mission of mercy, and give them and those engaged in similar blessed work all over the world our confidence, encouragement and aid?"<sup>15</sup> The AMA thus viewed medical progress as an unalloyed good which could not be negated by occasional injury to "lesser animals."

### **AMA Defines Ethics of Animal Experimentation**

Although initially loath to put any restrictions on laboratories whatsoever, the AMA eventually came to believe in 1909 that it was important to disseminate a set of rules, drawn up by the Bureau for the Protection of Medical Research of the AMA, to convince opponents that the medical profession was taking their concerns seriously. Still hostile to the idea that men in the medical profession could be said to do anything unethical, the Council, in creating these rules, notes: "Although they probably do not change in any respect the already good conditions under which animal experimentation is conducted, they indicate to newcomers in the laboratories and to interested and intelligent people the intent of the investigators and the precautions which they take against suffering."<sup>5</sup>

The rules were as follows:

- I. Vagrant dogs and cats brought to this Laboratory and purchased here shall be held at least as long as at the city pound, and shall be returned to their owners if claimed and identified.
- II. Animals in the Laboratory shall receive every consideration for their bodily comfort; they shall be kindly treated, properly fed, and their surroundings kept in the best possible sanitary condition.
- III. No operations on animals shall be made except with the sanction of the Director of the Laboratory, who holds himself responsible for the importance of the problems studied and for the propriety of the procedures used in the solution of these problems.
- IV. In any operation likely to cause greater discomfort than that attending anesthetization the animal shall first be rendered incapable of perceiving pain and shall be maintained in that condition until the operation is ended. Exceptions to this rule will be made by the Director alone and then only when anesthesia would defeat the object of the experiment. In such cases an anesthetic shall be used so far as possible and may be discontinued only so long as is absolutely essential for the necessary observations.
- V. At the conclusion of the experiment the animal shall be killed painlessly. Exceptions to this rule will be made only when continuance of the animal's life is necessary to determine the result of the experiment. In that case, the same aseptic precautions shall be observed during the operation and so far as possible the same care shall be taken to minimize discomforts during the convalescence as in a hospital for human beings.<sup>5</sup>

### AMA's Post-1950s Activism

Toward the second half of the 20th century, the AMA spent less of its time on defending vivisection. A *JAMA* article on the AMA's historical role in the use of animals in biomedical research states that, in the 1960s, "The AMA and the NSMR [National Society for Medical Research] recognized the need for uniform standards for the care of laboratory animals to convince the public and Congress that federal regulations were not necessary to ensure the humane treatment of research animals. In 1963, the AMA Board of Trustees organized the AMA Task Force for Laboratory Animal Care.<sup>4</sup> From that time, the AMA has occasionally reiterated its support for the practice of animal experimentation in medicine. Although the language may have changed, the general principles behind the AMA's ethical support of vivisection have remained. As recently as 2015, the House of Delegates reaffirmed its policy that "The AMA encourages medical school faculty who use animals in the education of students to continue instruction of students on the appropriate use and treatment of animals."<sup>18</sup>

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