

Power of Medical History: American Reactions to Biomedicine

David Warner*

Department of Biomedicine, Yale University, USA

Corresponding author: David Warner

✉ warner6@gmail.com

Department of Biomedicine, Yale University, USA

Citation: Warner D (2022) Power of Medical History: American Reactions to Biomedicine. *Transl Biomed*, Vol. 13 No. 11: 270.

Abstract

The notion that medical history can and should serve modern medicine as a humanizing force has been a recurring theme in American medicine from the end of the 19th century to the present. This research investigates the origin of this notion at precisely the time when contemporary Western biomedicine became dominant, with a focus on the United States. Some professional leaders started to warn that the same adherence to science that was fueling professional technical and cultural success was also endangering humanistic values that were essential to professionalism, the art of medicine, and cultural cohesion in the same institutions where the new version of scientific medicine was most enthusiastically embraced. They recognised in history a way to re-humanize contemporary medicine and forestall the threat of a cultural upheaval.

Medical "humanism" has many different connotations, but as this research demonstrates, at least one version of the idea that history has the power to make people better people endured very well throughout the 20th century. It was particularly revived in the 1970s as part of a broader cultural critique of the alleged "de-humanization" of the medical establishment, when some proponents promoted medical history as a tool for creating a new type of humanist doctor and a source of direction in addressing social inequities in the healthcare system. What has endured over time is how the notion of history as a humanising force has frequently served as a language of deficiency—a response to alleged flaws in biomedicine, medical institutions, and medical professionalism.

Keywords: Medical History, Medical Humanities, Medical Humanization, Medical de-humanization, Medical Professionalism

Received: 01-Nov-2022, Manuscript No. iptb-22-13228; **Editor assigned:** 04-Nov-2022, PreQC No. PQ- iptb-22-13228; **Reviewed:** 18- Nov-2022, QC No. iptb-22-13228; **Revised:** 22-Nov-2022, Manuscript No. iptb-22-13288 (R); **Published:** 30-Nov-2022, DOI: 10.36648/2172-0479.13.11.270

Introduction

My main point is that history can and should act as a humanising factor in modern medicine. Let me state unequivocally that the majority of American medical historians today, including myself, would be quite dubious of any assertion that medical history humanises physicians, medical students, or the greater healthcare industry [1]. As a historian, I find it all the more amazing that the idea that history should be a fundamental component of humanistic medicine first surfaced at the exact time that modern Western biomedicine began to take off, and that some iteration of this idea of history as a humanising force has been remarkably durable. I wish to describe how this concept

came to be, concentrating solely on the United States, then to draw a rough outline of its extended journey during the 20th century [2]. Almost often, the notion of history as a humanising force has served as a discourse of inadequacy. There have also been anti-scientific currents, but I'm not focusing on those right now. Rather, I wish to consider this concept as a illuminating measure of how biomedicine, while lauded for its technological prowess, has come to be perceived as inadequate for producing competent medical professionals, promoting ethical behaviour, and guiding socially acceptable health care systems. The acceptance of the new experimental sciences was revolutionising American medical institutions, practise, and knowledge by the turn of the 20th century. Reductionism, specialisation,

standardisation, accuracy, technology, and a self-assured faith in the laboratory as the primary source of medical development were prioritised in this new Western scientific medical model known as biomedicine [3]. Medical professionals could employ experimental research as a technical tool at the patient's bedside as well as a potent marketing strategy. The medical profession's affiliation with this new scientific medicine was furthered in the 1910s by the comprehensive restructuring of medical education was a driving force behind the profession's unprecedented rise to prominence in American society [4]. In light of this, it is all the more amazing that at the very medical institutions where the new version of scientific medicine was most strongly established, some physicians started to warn that the same adherence to science that was fostering the profession's technical and cultural success was also putting humanistic values that were essential to professional identity, the art of medicine, and cultural cohesion in danger. With greater influence than ever, western medicine was vulnerable to a cultural crisis. This was not a cry from the majority of general practitioners, but rather from some of the most prominent figures in the field [5].

Who embraced rather than opposed emerging scientific treatment. They viewed medical history as a means of re-humanizing modern medicine, a check on individual doctors' reductionist hubris, and a force that held medicine together in the face of the tendency of an increasingly specialised medical field to fragment. The foundation of a "new humanism" in medicine, which would encourage intercultural dialogue between the sciences and the humanities, was to be history. This would provide a forum for addressing concerns about cultural differentiation spurred by the rise of biomedicine [6].

Many Americans who had travelled to study in German universities the new experimental laboratory sciences and clinical specialties during the closing decades of the 19th century had returned dedicated to the idea of a new sort of scientific medicine. They portrayed the laboratory as representing precision, homogeneity, exactness, and severity. These values served as the inspiration for a strategy to liberate medicine from its monotonous obsession with the peculiarities of individual patients. The adoption of reductionism and mechanical objectivity, or the "precise method," would turn clinical medicine into an exact science. The call to free medicine from the doctor's subjective observation and evaluation was novel [7]. Every new technological advancement received praise for its claim to "eliminate the personal equation of the spectator." This application for The role that history had previously played in medicine was also rendered meaningless by this agenda for a new scientific medicine. Before the middle of the eighteenth century, history had been an essential component of Western medicine as a source of authority and a means of expressing theory. However, in the new system, authority was to be granted by experimental research rather than by history. In fact, a modern professional identity was developed with a conscious rupture from the past [8]. At the latter end of the 19th century, however, there was a revival in the history of medicine, but it was a new kind of history with a different purpose, first occurring in Germany, where the experimental laboratory sciences had been fundamental to medicine earlier than in the rest of the West.

Result

Many prominent physicians were concerned that the

epistemological and technical advances of the new science may have been purchased at a very high cost due to the reductionist program's overwhelming success in transforming medical knowledge and society. For instance, at an era of scientific ideals, Theodor Puschmann, a professor of medical history in Vienna, called for a dehumanization of the doctor in 1889 [9]. He believed that a medical school may benefit greatly from the study of medical history since it would broaden potential doctors' perspectives, elevate their moral character, keep them from succumbing to "superficial materialism," and establish a solid foundation for professional expertise. He emphasised in particular that there was a greater need than ever for history to serve as a unifying force, bridging the expanding distance between the laboratories across the fragmenting specialties and in the clinic.

Discussion

The institutions of the new scientific medicine were far less developed in the United States than they were in Europe, and there were no academic positions in medical history. However, some (typically older) doctors vehemently opposed such a strategy as not only simplistic but hazardous, especially when some doctors who had studied in Germany began to preach for the new scientific medicine anchored in the experimental laboratory. Their concerns about reductionist arrogance were conveyed in a newly urgent exaltation of the art of medicine [10]. There is a kind of medicine that, in the words of one Philadelphia doctor, "totally eludes or openly contradicts science by means of empirical facts and favours sagacity and common sense over laws created by experiment." The ideas that experimental science could provide certainty for therapeutic practise precise make it only an applied science, endangering professional standing. Furthermore, it appeared to redefine professional obligation in terms that were so constrained as to be morally dubious. A New York doctor asserted that "medicine is a science of which the pervading principle is humanity" in response to debates over the idea that the new experimental sciences could turn medicine into an exact science in the 1880s.

Conclusion

Opponents rallied around an older conception of medical science and a new celebration of art. Some American doctors came to believe that medical history provided a middle ground for thinking about medical professionalism—a framework that promised to include new sciences while upholding traditional values. History started to be cited as one way to harmonise science and art at precisely those institutions where the new idea of scientific medicine was most zealously established, especially the German-modeled medical school opened in 1893 at Johns Hopkins University. A rehumanization of medicine was advocated by doctors like John Shaw Billings and William Osler, both of whom were instrumental in the establishment of the Johns Hopkins Hospital Historical Club in 1890. They promoted the idea of the "gentleman-physician," who was knowledgeable with the traditional liberal theories, as a partial counterbalance to excessive specialisation, reductionism, commercialism, and cultural disintegration.

References

- 1 Sies H, Berndt C, Jones DP (2017) Oxidative Stress. *Annual Review of Biochemistry* 86: 715-748.
- 2 Lu J, Randell E, Han Y, Adeli K, Krhan J, et al. (2011) Increased plasma methylglyoxal level inflammation, and vascular endothelial dysfunction in diabetic nephropathy. *Clin Biochem* 44: 307–311.
- 3 Lapolla A, Flamini R, Vedova AD, Senesi A, Reitano R, et al. (2003) Glyoxal and methylglyoxal levels in diabetic patients: quantitative determination by a new GC/MS method. *Clin Chem Lab Med* 41:1166–1173.
- 4 Ahmed N, Dobler D, Dean M, Thornalley PJ (2005) Peptide mapping identifies hotspot site of modification in human serum albumin by methylglyoxal involved in ligand binding and esterase activity. *J Biol Chem* 280: 5724–5732.
- 5 Lee D, Park CW, Paik SR, Choi KY (2009) The modification of α -synuclein by dicarbonyl compounds inhibits its fibril-forming process. *Biochim Biophys Acta* 1794: 421–430.
- 6 Bose T, Bhattacharjee A, Banerjee S, Chakraborti AS (2013) Methylglyoxal-induced modifications of hemoglobin: structural and functional characteristics. *Arch Biochem Biophys* 529: 99–104.
- 7 Banerjee S, Chakraborti AS (2017) Methylglyoxal modification enhances the stability of hemoglobin and lowers its iron-mediated oxidation reactions: an in vitro study. *Int J Biol Macromol* 95: 1159–1168.
- 8 Banerjee S (2021) Biophysical and mass spectrometry based characterization of methylglyoxal-modified myoglobin: Role of advanced glycation end products in inducing protein structural alterations. *Int J Biol Macromol* 193: 2165–2172.
- 9 Rabbani N, Thornalley PJ (2012) Methylglyoxal, glyoxalase 1 and the dicarbonyl proteome. *Amino acids* 42: 1133–1142.
- 10 Kleter GA, Damen JJM, Buijs MJ, Cate JMT (1998) Modification of amino acid residues in carious dentin matrix. *J Dent Res* 77: 488–495.