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(REVIEW ARTICLE)

# Impact of the Flexner's report on health professional education

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# Abstract

Flexner's report on health professional education, also known as the Flexner Report, was published in 1910. It was a landmark document that revolutionized medical education in the United States and influenced healthcare education globally. The report was written by Abraham Flexner, who was commissioned by the Carnegie Foundation, and its objective was to assess the quality and standards of medical schools in the U.S. and Canada. Flexner visited 155 medical schools and evaluated them based on certain criteria such as faculty qualifications, curriculum, facilities, and research output. The Flexner Report was instrumental in improving the quality of health professional education and establishing the notion that physicians should receive comprehensive scientific education and clinical training. Its legacy continues to this day, as the principles and standards introduced by the report still guide modern medical education.

**Keywords:** Flexner's report; Health professional education; Medical education

# 1. Introduction

The Flexner Report, produced by American educator Abraham Flexner and released in 1910 under the auspices of the Carnegie Foundation, is a book-length seminal study of medical education in the United States and Canada. The Flexner Report and its aftermath had a significant impact on many facets of the modern American medical profession. Critics have attacked the Flexner report for establishing measures that supported institutional racism. The Flexner Report fundamentally altered the nature and process of medical education in America. The report, which accepted scientific knowledge and its expansion as the defining ethos of a modern physician, was the catalyst for this transition. Such an attitude has its roots in the fascination with German medical education that was sparked by the introduction of American educators and doctors to the university medical institutions of Europe at the turn of the 20th century [1]. Following the Flexner Report, the medical process in North America saw significant reform in several areas. Medical education grew more based in human physiology and biochemistry and more closely followed the scientific approach. Medical research was more closely in line with scientific research methods. The standard of medical care has greatly improved [2]. As a result of the report, medical education in the U.S. underwent a significant transformation. Medical schools were encouraged to adopt a model based on rigorous scientific education and clinical training. Standards were raised, and the number of medical schools reduced. This marked a shift towards a modern, science-based approach to medical education, which has since become the standard.

# 1.1. The major recommendations that Flexner report included.

Barzansky and Gevitz summarize the seven major recommendations that Flexner included in his report [3].

• To reduce the number of poorly trained physicians.

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- To reduce the number of medical schools from 155 to 31 (by the time the report was published schools had already decreased to 131).
- To increase the prerequisites to enter medical training.
- To train physicians to practice in a scientific manner.
- To engage the faculty in research.
- To have medical schools' control clinical instruction in hospitals; and
- To strengthen state regulation of medical licensure.

#### 1.2. Consequences and Impact of the Flexner report

Many components of the scientific career in North America modified following the Flexner Report. Medical education adhered extra carefully to scientific technique and grew to become grounded in human physiology and biochemistry. Medical lookup aligned greater thoroughly with the protocols of scientific research.

#### **1.3. -Medical school closings**

Flexner sought to reduce the number of medical schools in the US. Most American institutions granting MD or DO degrees as of the date of the Report (1910) closed within two to three decades. In Canada, only the medical school at Western University was deemed inadequate, but none was closed or merged after the Report. In 1904, there were 160 MD-granting institutions with more than 28,000 students. By 1920, there were only 85 MD-granting institutions, educating only 13,800 students. By 1935, there were only 66 medical schools operating in the US [4].

## 1.4. Impact on African American doctors and patients

Flexner recommended closing all but two of the traditionally black scientific schools. As a result, solely Howard University College of Medicine and Meharry Medical College have been left open, whilst 5 different colleges have been closed. Flexner's view was once that black medical practitioner needs to deal with solely black sufferers and must play roles subservient to these of white physicians [5].

## 1.5. Impact on alternative medicine

When Flexner researched his report, "modern" remedy confronted full of life opposition from quite a few quarters, consisting of osteopathic medicine, chiropractic medicine, electrotherapy, eclectic medicine, naturopathy, and homeopathy.

#### 1.6. Here are some of the general significant impacts of the Flexner's report.

- Standardization of Medical Education: The report advocated for strict standards and uniformity in medical education. It highlighted the importance of science-based curricula, robust faculty, and enough resources for teaching and research. As a result, medical schools began adopting a standardized curriculum, which led to the improvement of medical education across the United States and Canada.
- Closure of Inadequate Medical Schools: Flexner's report exposed many inadequate medical schools that lacked proper facilities, faculty, and clinical training opportunities. The report recommended the closure or consolidation of such schools. As a result, a significant number of medical schools were closed, leading to a reduction in the number of medical graduates and an overall improvement in the quality of education. The application of cognitive functions in education involves utilising the understanding of how the brain processes information to inform instructional design, assessment methods, and student support strategies [6].
- Emphasis on Clinical-Based Learning: The Flexner's report stressed the importance of clinical experience in medical education. It highlighted the need for medical students to have direct patient care experience in well-equipped hospitals and emphasized the value of bedside teaching. This led to the establishment of teaching hospitals associated with medical schools, thereby enhancing the clinical training of medical students. Integrating technology into the classroom is an important way to connect all learning styles with students. Educational incorporation of technology helps students stay engaged. It places great emphasis on instruction for students on technological knowledge, pedagogical knowledge, and content knowledge (TPACK) [7].
- Focus on Medical Research: Another important impact of the Flexner's report was the emphasis on research as an integral component of medical education. The report recommended the inclusion of research opportunities for both faculty and students and the integration of research findings into medical practice. This resulted in a significant increase in medical research and advancements in medical knowledge.
- Increased Professionalism and Ethics: Flexner's report emphasized the importance of professionalism and ethics in medical education. It called for medical schools to instill ethical values, integrity, and a sense of responsibility

among their students. Following the report, medical schools began to give more attention to teaching medical ethics, fostering a sense of professionalism among future healthcare professionals.

Overall, the Flexner Report was instrumental in improving the quality of health professional education and establishing the notion that physicians should receive comprehensive scientific education and clinical training. Its legacy continues to this day, as the principles and standards introduced by the report still guide modern medical education.

## 2. Conclusion

Overall, the impact of the Flexner's report was transformative, leading to significant improvements in the quality and standards of health professional education. It established a foundation for modern medical education, focusing on scientific rigor, clinical training, and ethical principles, which continue to influence health professional education to this day.

#### References

- [1] Duffy TP. The Flexner Report-100 years later. Yale J Biol Med. 2011 Sep;84(3):269-76. PMID: 21966046; PMCID: PMC3178858.
- [2] Claydon E, McAlister VC. The life of John Wishart (1850-1926): study of an academic surgical career prior to the Flexner Report. World J Surg. 2012 Mar;36(3):684-8. doi: 10.1007/s00268-011-1407-x. PMID: 22270978; PMCID: PMC3279636
- [3] Barzansky, B.M. and Gevitz, N. eds., 1992. Beyond Flexner: medical education in the twentieth century.
- [4] McAlister, Vivian; Claydon, Emily (2012). "The Life of John Wishart (1850–1926): Study of an Academic Surgical Career Prior to the Flexner Report". World Journal of Surgery. 36 (3): 684–8.
- [5] Sullivan, Louis W.; Suez Mittman, Ilana (February 2010). "The State of Diversity in the Health Professions a Century After Flexner". Academic Medicine. 85 (2): 246–253
- [6] Asaad, Mohammed Ahmed Babker. "Explore the Role of Different Cognitive Functions in Education." Journal of Education and Practice 7, no. 2 (2023): 68-73.
- [7] Ali, Wadah M., Rose A. Arceño, and Asaad MA Babker. "Students' Contextualization on Technology Use in Learning. International Journal of Sciences: Basic and Applied Research (IJSBAR) (2019) Volume 48, No 7, pp 208-215