

Chiropractic Education comparison with Medical Education and Training

Table 1. Comparisons of the Overall Curriculum Structure for Chiropractic and Medical Schools

	Chiropractic Schools		Medical Schools	
	Mean	Percentage	Mean	Percentage
Total Contact Hours	4822	100%	4667	100%
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Basic science hours	1416	29%	1200	26%
Clinical science hours	3406	71%	3467	74%
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Chiropractic science hours	1975	41%	0	0
Clerkship hours	1405	29%	3467	74%

Source: Center for Studies in Health Policy, Inc., Washington, DC. Personal communication of 1995 unpublished data from Meredith Gonyea, PhD.

Table 2. Comparison of Hours of Basic Sciences Education in Medical and Chiropractic Schools

Subject	Chiropractic Schools		Medical Schools	
	Hours	% of Total	Hours	% of Total
Anatomy	570	40	368	31
Biochemistry	150	11	120	10
Microbiology	120	8	120	10
Public Health	70	5	289	24
Physiology	305	21	142	12
Pathology	205	14	162	14
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Total Hours	1,420	100	1,200	100

Source: Center for Studies in Health Policy, Inc., Washington, DC. Personal communication of 1995 unpublished data from Meredith Gonyea, PhD.

A recent study comparing chiropractic and medical education collected data on all chiropractic and medical schools in North America and performed an in-depth analysis of three chiropractic and three medical schools (Coulter, submitted). Three States providing a broad geographic representation of the United States were chosen: California, Iowa, and Texas. These States account for almost half of the chiropractic colleges in the United States. A single chiropractic college and school of medicine were studied in each State.

The chiropractic schools included in this study had enrollments of 521, 773, and 1880, compared with a mean enrollment for all colleges of 878 (CCE Report, 1996). The three medical schools had enrollments of 691, 734, and 745, all moderately above the national average of 536 (*JAMA*, 1995).

1. Prerequisites: There is considerable overlap in the two professions in terms of the courses they require as prerequisites for entrance. Both require biology, general inorganic chemistry, organic chemistry, and general physics. In medicine it is common to require mathematics, which is not required in chiropractic. Both require a humanities prerequisite with chiropractic also requiring a social science/psychology credit as well as English and/or communication skills.

2. Program Length:

The chiropractic programs consist of 4 years of undergraduate education totaling approximately 4,800 contact hours. The medical programs consist of 4 undergraduate years, with approximately the same number of contact hours (4,667), but typically with an additional 3-year residency to meet the requirements for practice.

Two questions are of paramount importance in comparing the curricula of the two professions; what subjects are taught and how much is taught? The two programs are relatively similar in total student contact hours: an average of 4,822 hours in chiropractic schools compared with 4,667 hours in medical schools (Coulter, et al, submitted).

Basic science comprises 25-30 percent of the total contact hours in both the chiropractic and medical programs (Table 1) and the two programs have roughly similar contact hours in biochemistry, microbiology, and pathology (Table 2). Chiropractors receive substantially more hours in anatomy education and physiology but many fewer in public health.

The contrast between the two programs is dramatic in the area of *clinical clerkships*, which averaged 3,467 hours in medicine versus 1,405 hours in chiropractic. In medicine this comprises, on average, 74 percent of the total contact hours, while in chiropractic it comprises only 29 percent (Table 1). Part of the difference can be explained by the way in which the programs are structured. In chiropractic 41 percent of the program (averaging 1,975 hours) is allocated to chiropractic clinical sciences, which consists of extensive laboratory and hands-on training in manual procedures and has no equivalent in medicine. Combining the chiropractic clinical sciences with the clinical clerkships, the percentage of a chiropractic program devoted to *clinical education* is 70 percent compared to medicine's 74 percent. The major difference therefore is in didactic teaching and clinical experience.

Thus, on average, medical students receive twice the number of hours in clinical experience but receive over 1,000 fewer hours in lectures and laboratory education. If the medical residency is included, the total number of hours of clinical experience for medicine rises to 6,413 (Coulter, submitted).