

CHIROPRACTIC (GENERAL)

## **Evidence or Eminence-Based Medicine?** Leveling the Playing Field Instead of the Patient

Anthony Rosner, PhD, LLD [Hon.], LLC

In a letter to Bishop Mandell Creighton in 1887, Lord Acton penned the oft-cited expression, "Power tends to corrupt, and absolute power corrupts absolutely." Nowhere has this principle been more evident in our health care system than in our failure to displace the status quo - denying patients greater satisfaction, better outcomes and cost savings. It boggles the mind to realize that there exist concrete examples where compelling evidence exists to admit alternatives to the health care marketplace, yet patients are often neither empowered with nor aware of the possible effectiveness of these alternatives.

To paraphrase a popular expression from the "Dirty Harry" (Clint Eastwood) movies, unmasking just a few allegedly sacred truths in health care might just "make your day." These undoubtedly have tremendous bearing upon the status and potential of chiropractic health care delivery worldwide:

- 1. Effective and economical delivery systems of health care are denied access despite inferior and costly performance by the gatekeepers. In a presentation to a recent convention addressing the economics of health care,<sup>1</sup> Pran Manga described how physician assistants and dental hygienists, whose qualifications and capacities for effective management in many areas equal or exceed those of medical doctors or dentists, respectively, are denied access to many patients despite the fact that their services may be delivered at one-third the cost of conventional caregivers. In terms of chiropractic services, an impressive aggregate of scientific literature exists to demonstrate both its effectiveness<sup>24</sup> and cost-effectiveness, yet barriers continue to plague chiropractors<sup>5</sup> despite the fact that (i) the formal hours of training in professional schools in the didactic areas are about the same for MDs and DCs,<sup>6</sup> and (ii) orthopedic residents presumably representing the most musculoskeletal-savvy individuals of allopathic medicine have received failing scores in musculoskeletal competency examinations, verified by the chairmen of the departments of either orthopedic<sup>7</sup> or internal<sup>8</sup> medicine.
- 2. The relative risks of chiropractic versus medical or dental procedures are vastly overblown: The hysteria with which the medical literature<sup>9-11</sup> and press<sup>12</sup> have reported the risks of chiropractic procedures has been the subject of previous reports from my desk. Published death rates from cervical manipulation - on the order of three per 10 million adjustments<sup>13</sup> or even less<sup>14</sup> - turn out to be no greater than those reported for dying from falling out of bed,<sup>15</sup> dying from a series of dental x-rays,<sup>16</sup> or drowning in a bathtub.<sup>16</sup> Meanwhile, it can be demonstrated that the most plausible rates of stroke reported for cervical manipulations, ranging anywhere from 0.613 to 2.5 per million,<sup>17</sup> are 17-50 times less than the rates of spontaneous cervical or carotid artery dissections.<sup>18-20</sup>

When one begins comparisons with medical procedures, the statistics really begin to spin one's head. Using a baseline figure of one per one million as an estimate of stroke incidence attributed to cervical manipulations, one finds a:

 $\circ~$  two times greater risk of dying from transfusing one unit of blood;  $^{\rm 16}$ 

- $\circ$  100 times greater risk of dying from general anesthesia;<sup>16</sup>
- $\circ~$  160-400 times greater risk of dying from use of NSAIDs;  $^{\scriptscriptstyle 21}$
- 700 times greater risk of dying from lumbar spinal surgery;<sup>22</sup>
- $\circ$  1000-10,000 times greater risk of dying from traditional gall bladder surgery;<sup>16</sup>
- $\circ$  10,000 times greater risk of serious harm from medical mistakes in hospitals.<sup>16</sup>

The 225,000 deaths per year attributed to medical iatrogenesis have propelled it to the third leading cause of death, after heart disease and cancer.<sup>23</sup> A truly eloquent examination of the relative risks that our population deems "acceptable" - all far above those numbers reported for spinal manipulation - has been published recently by Rome.<sup>24</sup>

3. Many accepted medical practices are in a constant state of flux, almost approaching fad status. That medical practices often seem to follow fashion rather than unassailable standards extensively documented in recent articles. Breastfeeding, botox, leeches, and electroshock therapy - all taboo for extended periods during the 20th century - have made significant comebacks in clinical circles.<sup>25</sup> Long-term hormone replacement therapy to manage osteoporosis or hot flashes during menopause has recently been suggested to increase the rates of deep-vein thrombosis, pulmonary embolism or biliary tract surgery,<sup>26-28</sup> while mammograms may not reduce mortality in breast cancer after all.<sup>29</sup> Within the past few months, arthroscopic surgery has been shown to be no more effective than sham surgery in treating osteoarthritic knee problems.<sup>30</sup> Finally, how could we fail to mention that the authoritative *Merck Index* just 100 years ago recommended formaldehyde for treating the common cold, ammonia for male baldness, smoking for asthma, opium for alcoholism, and strychnine for treating diphtheria?<sup>31</sup>

From the physician's point of view, guidelines continue to proliferate, but are often ignored. Even in the medical journals, one has to sit up in stark amazement when such a medically entrenched publication as the *Canadian Medical Association Journal* concludes something chiropractors have maintained for decades: "Treatment of musculoskeletal pain should focus on the underlying cause, and in many cases, the use of any anti-inflammatory drug is inapproprate."<sup>32</sup>

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The only problem is that the same article blows its cover by laying out options that omit any reference to spinal manipulation, concluding: "Nonpharmacologic treatments, including strengthening and stretching exercises, ice or heat are often underused." It is tempting to imagine what the authors would have said about spinal manipulation, if only they could remember the lyrics. This "amnesia" of spinal manipulation, unfortunately, is nothing new,

having been shown previously in guidelines from  $Harvard^{33}$  and the AMA -<sup>34</sup> in clear violation of the principles of informed consent, elegantly articulated and upheld in the New Jersey

Supreme Court,<sup>35</sup> and discussed at length in this space previously.<sup>36</sup>

This leaves the patient with every justification to demand more empowerment, including greater access to diverse and qualified health care providers - including chiropractors. With the vast majority of medical therapies having never been evaluated by a systematic study, many prevailing practices become that way more because of belief, political power and repression. As implied by Kevin Patterson, the tendency to accept surgical alternatives, for example, could be linked to the age-old axiom, "Never let the sun set on an abscess (i.e., operate immediately)." Absolute, testosterone-charged, black-and-white statements by heroic physicians will have to give way to the grey world of numbers brought to us by evidence -

rather than eminence-based medicine.<sup>37</sup>

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Anthony Rosner,PhD Brookline, Massachusetts rosnerfcer@aol.com

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