

# An Ounce of Prevention: Lessons From Katrina

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As horrifying as the recent devastation of Hurricane Katrina has been in New Orleans and the Gulf Coast, the only way people can hope for a better future is if it becomes a lesson learned. This would immediately raise questions about global warming and particularly about flood control. For after the Netherlands was flattened by the North Sea in 1953, with a death toll of 2,000, it constructed a massive network of hydraulic sea walls to prevent a recurrence from a "perfect storm." This has become a model for other locations prone to flood damage, such as Venice. It's called prevention.

And why not New Orleans? Even though some federal money is forthcoming to build up the network of levees, pumps and canals to keep water out of the city, it is not enough - and a plea from the state for additional funds was turned down as recently as this summer by a government bent on budget-cutting.<sup>1</sup> Now, of course, the bill facing the government, and the economic consequences, are far higher - perhaps by several orders of magnitude.<sup>1</sup>

Returning to the Dutch protective sea walls for a minute, consider what Ted Sluijter, a spokesman from the Netherlands, had to say about the hurricane's destruction: "It's hard to imagine that [the damage caused by Katrina] could happen in a Western country ... it seemed like plans for protection and evacuation weren't really in place, and once it happened, the coordination was on loose hinges."<sup>2</sup> So, whether you have global warming or flood control, there are messages to be heard, and loudly.

Precisely. It's absolutely the same enchilada with health care in the United States. Consider these points:

1. The United States spends an estimated \$3,724 per person on health care each year (almost twice that of Japan, ranked #1 in length of life lived in good health), yet in ranking of quality of health care, it placed 37<sup>th</sup> on a list of 191 countries.<sup>3</sup> Another ranking of 16 available health indicators of 13 industrialized countries placed the United States dead last in terms of neonatal mortality and years of potential life lost, excluding external causes.<sup>4</sup>
2. Through the 1990s, the U.S. was spending about 13 percent of its Gross National Product on health care alone, with projections of 15 percent through the 2000s.<sup>5</sup>
3. The main factor in the increase of health care costs is pharmaceuticals.<sup>6</sup>
4. The costs of health care administration by insurers, benefit programs, hospitals, practitioner offices, nursing homes, and home care agencies in the U.S. accounts for 31% of total expenditures, twice that observed in Canada.<sup>7</sup>
5. The total number of back surgeries each year in the U.S. was found to exceed 250,000, at a hospital cost of \$11,000 per patient - and that was 10 years ago.<sup>8</sup> Using the rate of 17.6 percent of all surgeries found to be unnecessary by the Congressional Committee on Interstate and Foreign Commerce,<sup>9</sup> if you did the math, that would mean the number of unnecessary back surgeries each year in the U.S. is 44,000, at a total cost of \$484 million.

6. About a third of workers' compensation distribution goes toward back pain.<sup>10</sup> Yet in the state of Georgia, the amount disbursed toward chiropractors - presumably the experts in managing back pain - was an absurdly and unforgivably low 0.7 percent of the total.<sup>11</sup>
7. Iatrogenesis in the United States may produce 225,000 deaths per year (the third leading cause of death, after heart disease and cancer),<sup>12</sup> at an estimated cost in just the outpatient settings of \$77 billion.<sup>13</sup>

What does all of this mean and how does it relate to the holocaust from Katrina? To quote the baseball legend Yogi Berra, "It ain't rocket surgery folks." Just to drive home item #7 above in terms of the restorations after hurricanes - the iatrogenesis bill every year is triple the amount spent over many years to clean up after Hurricane Andrew (\$21 billion<sup>14</sup>) and would be projected to exceed, by a factor of 2 or 3, the one-time amount needed to restore the areas demolished by Katrina.<sup>14</sup>

To avoid future catastrophes, whether in hurricane protection or health care, a single word knits everything together: prevention. As I pointed out in a previous column,<sup>15</sup> no less a personage than the director of the NIH stated that prevention is where medicine has to be within the next 25 years or else it is toast.<sup>16</sup> This dire warning was essentially echoed by the Institute of Medicine.<sup>17</sup>

At what appears to be a critical time in which the nation's priorities are being reassessed - whether in flood control, evacuation plans, or health care - there could be no better opportunity for chiropractic to finally capture the public's attention, free from distortions by the media or junk science. The essential component is to recognize chiropractic care in the areas supported by research, as a first-contact and arguably preventative mode of care, rather than something far more costly downstream.

What are the early indications that preventative maintenance is a goal worth pursuing with further research? Three studies stand out:

1. A cohort of elderly patients under chiropractic care displayed far fewer visits to hospitals and nursing homes while remaining more active in the community. There could be any number of reasons these patients are doing so much better, chiropractic care being one of them. Certainly this demands more serious attention in our research efforts.<sup>18</sup>
2. Another, broader sample of elderly patients under chiropractic care spent less than a third on their overall health care compared to patients lacking such care. One again, there is the possibility that chiropractic care could have something to do with this.<sup>19</sup> In the words of my esteemed 6<sup>th</sup> grade teacher, this association "should compel our undivided attention."
3. The most elegant investigation in this area to date, by Martin Descarreaux at the University of Quebec at Trois-Rivieres, demonstrated in a small clinical trial that those patients undergoing widely spaced treatments over three weeks for nine months, following one month of 12 visits, continue to display improvements in their disability scores throughout this period. Patients who have no such follow-up treatments after their initial one-month treatment period reveal a reversion of disability scores to their baseline levels.<sup>20</sup>

As government, private industry, the economy, and every individual cope with this latest crisis of global magnitude, I hope the penny finally drops and people realize that future investments in research and cost-effective and efficient health care are rapidly becoming the only viable alternative. Continuing on our present path is simply untenable. Both the research and practice of chiropractic, for too long under the thumb of arbitrary and capricious policies of restriction and

exclusion, should appear to most rational minds to occupy a central position in the road to reallocating our resources in a productive manner. Now, more than ever, chiropractic research and practice need recognition and support for a meaningful future in health care.

## References

1. Milligan S. US earlier rebuffed Louisiana on aid. *The Boston Globe*, Sept. 1, 2005, p. A12.
2. Kirka D. World reacts with compassion, shock. *The Boston Globe*, Sept. 1, 2005, p. A13.
3. Feachem RG. Health systems: More evidence, more debate [editorial]. *Bulletin of the World Health Organization* 2000;78(6):715.
4. Starfield B. *Primary Care: Balancing Health Needs, Services, and Technology*. New York, NY: Oxford University Press, 1998.
5. *The Economic and Budget Outlook: Fiscal Years 1999-2008*. Congressional Budget Office, January 1998.
6. Report from the Department of Health and Human Services, reported in *The New York Times*, Jan. 8, 2002.
7. Woolhandler S, Campell T, Himmelstein DU. Costs of health care administration in the United States and Canada. *New England Journal of Medicine* 2003;349(8):768-775.
8. Herman R. Back surgery. *Washington Post* [Health Section], April 18, 1995.
9. Leape LL. Unnecessary surgery. *Annual Review of Public Health* 1992;13:363-383.
10. Hooper P. Cost of musculoskeletal injuries on the job. *Dynamic Chiropractic*, Dec. 2, 1994: [www.chiroweb.com/archives/12/25/23.html](http://www.chiroweb.com/archives/12/25/23.html).
11. [http://swbc.georgia.gov/vgn/images/portal/cit\\_1212/10/22/12724921ataglace.pdf](http://swbc.georgia.gov/vgn/images/portal/cit_1212/10/22/12724921ataglace.pdf).
12. Starfield B. Is US health really the best in the world? *Journal of the American Medical Association* 284(4):483-485.
13. Weingart SN, Wilson RM, Gibbard RW, Harrison B. Epidemiology and medical errors. *British Medical Journal* 2000;320:774-777.
14. [www.moneyweb.co.za/business\\_today/479561.htm](http://www.moneyweb.co.za/business_today/479561.htm).
15. Rosner A. Identity crisis: a profession at the crossroads. *Dynamic Chiropractic*, June 4, 2005: [www.chiroweb.com/archives/23/12/30.html](http://www.chiroweb.com/archives/23/12/30.html).
16. Zerhouni E. April 14, 2005, quoted in the *Boston Globe*, April 19, 2005, pp. D1, D4.
17. Chassin MR, Galvin RW. National Roundtable on Health Care Quality: The urgent need to improve health care. *Journal of the American Medical Association* 1998;280(11):1000-1005.
18. Coulter ID, Hurwitz EL, Aronow HU, et al. Chiropractic patients in a comprehensive home-based geriatric assessment, follow-up and health promotion program. *Topics in Clinical Chiropractic* 1996;3(2):46-55.
19. Rupert RL, Manello D, Sandefur R. Maintenance care: health promotion services administered to U.S. chiropractic patients age 65 and older. *Journal of Manipulative and Physiological Therapeutics* 2000;23(1):10-19.
20. Descarreaux M, Blouin J-S, Drolet M, et al. Efficacy of preventive spinal manipulation for chronic low back pain and related disabilities: a preliminary study. *Journal of Manipulative and Physiological Therapeutics* 2004;27(8):509-514.

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NOVEMBER 2005