Does Chiropractic 'Add Years to Life'?

Lon Morgan, DC, DABCO

The chiropractic cliché "Chiropractic Adds Life to Years and Years to Life" was examined for validity. It was assumed that chiropractors themselves would be the best informed about the health benefits of chiropractic care. Chiropractors would therefore be most likely to receive some level of chiropractic care, and do so on a long-term basis. If chiropractic care significantly improves general health then chiropractors themselves should demonstrate longer life spans than the general population.

Two separate data sources were used to examine chiropractic mortality rates. One source used obituary notices from past issues of Dynamic Chiropractic from 1990 to mid-2003. The second source used biographies from Who Was Who in Chiropractic – A Necrology covering a ten year period from 1969–1979. The two sources yielded a mean age at death for chiropractors of 73.4 and 74.2 years respectively.

The mean ages at death of chiropractors is below the national average of 76.9 years and is below their medical doctor counterparts of 81.5.

This review of mortality date found no evidence to support the claim that chiropractic care "Adds Years to Life."

(JCCA 2004; 48(3):217–224)

Le cliché en chiropratique selon lequel « La chiropratique ajoute de la vie aux années et des années à la vie » a été examiné pour en prouver le bien-fondé. On a émis l'hypothèse que les chiropraticiens et les chiropraticiennes seraient eux-mêmes les mieux informés sur les avantages pour la santé des soins chiropratique puisqu'ils auraient vraisemblablement reçu un certain nombre de traitements et ce, sur une longue période. Si la chiropratique améliore d'une façon sensible la santé en général, alors l'espérance de vie des chiropraticiens et des chiropraticiennes devrait être plus longue que chez la population en général.

On a utilisé deux sources différentes de données pour étudier le taux de mortalité chez les chiropraticiens et les chiropraticiennes. L'une d'elles était la nécrologie des exemplaires de Dynamic Chiropractic de 1990 jusqu'au milieu des années 2003. La seconde source provenait des biographies de « Who Was Who in Chiropractic : A Necrology » s'étendant sur une période de dix ans de 1969 à 1979. On a obtenu une moyenne d'âge au décès pour les chiropraticiens et chiropraticiennes de 73,4 ans et de 74,2 ans respectivement pour chacune des sources.

La moyenne d'âge au décès chez les chiropraticiens et les chiropraticiennes est en dessous de la moyenne nationale de 76,9 ans et en dessous de la moyenne de 81,5 ans chez les médecins.

Cette revue des taux de mortalité n'a fourni aucune preuve visant à soutenir l'affirmation selon laquelle des traitements chiropratiques « Ajoutent des années à la vie »

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MOTS CLÉS: chiropratique, santé, population.

KEY WORDS: chiropractic, health, population.

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Does Chiropractic add 'Years to Life'?

"Chiropractic adds Life to Years, and Years to Life"

Introduction

Imbued within our culture are clichés, or sayings, that many accept as truisms without examining their validity. We often repeat clichés not realizing they are often contradictory. Some examples might include: "Look before you leap" vs. "He who hesitates is lost"; or "Absence makes the heart grow fonder" vs. "Out of Sight, Out of Mind"; or, for those in health care, "Above all do no harm" vs. "To Err is Human".

Chiropractic has its own cliches, and with repetition and time they take on a life of their own. Some common clichés in chiropractic include "When Your Spine's in Line, You'll Feel Fine"; or "Find it, Fix it, and Forget it"; or (as a technique criticism) "It's just Push, Poke, Pop, and Pray".

This paper will examine a common chiropractic cliché: "Chiropractic adds Life to Years, and Years to Life". This cliché reflects a common assumption that chiropractic care has a definable positive effect on overall human health and longevity.

Few would argue that the twentieth century brought dramatic improvements in human health and longevity. At the beginning of the twentieth century life expectancy for a U.S. male at birth was 27.2 years. By the year 2000 that male life expectancy had risen to an all time high of 76.9 years.

Never before in recorded history has such a dramatic change in human health and longevity occurred. The greatest relative improvement has taken place in younger ages with the control of infectious diseases.¹

At the turn of the 20th century the major causes of death were respiratory, infectious, and gastrointestinal diseases that together accounted for 40% of all mortalities. Today the leading causes of death are heart disease and cancer. As diseases are controlled, especially child-hood diseases, human longevity and population increase. Obviously, if a disease that kills people is controlled, then people will not die from that disease and will thus live longer. The dramatic increase in world population in the past century is the direct result of this declining mortality, not increased fertility.³

Even before the 20th century improvements in longevity during the Industrial Revolution resulted from im-

provements in public health, food supply, sanitation and living standards. By the early 20th century further increases in longevity came with the control of smallpox, cholera, tuberculosis and other infectious diseases. Looking to the future, if further improvement in human lifespan is to be made it will come by controlling cancer and heart diseases, today's biggest killers.³ Can chiropractic demonstrate a measurable effect on either of these ailments?

Within the phrase "Chiropractic Adds Years to Life" lies a certain presumption. If the cliché is valid, and not just marketing hype, then chiropractors themselves should be exemplars of it. If anyone benefits from living the "chiropractic lifestyle" it should be chiropractors themselves. Who else would be the best living examples of the health and longevity benefits of chiropractic care if not chiropractors themselves?

To answer the question: "Do chiropractors live longer?" a survey of chiropractic mortality in the U.S. was done and the data compared with national databases.

Methods

Because no nationally recognized database tracks chiropractic mortality, per se, it was necessary to derive this data from other sources. One publication, *Dynamic Chiropractic*, is a trade paper with wide circulation in the chiropractic community. *Dynamic Chiropractic* periodically lists the passing of certain chiropractors, typically in a "*Moment of Silence*" or "*In Remembrance*" column.

Other sources of chiropractic mortality data was the text "Who Was Who in Chiropractic – A Necrology," college publications and individual websites, and other sources. Most of the chiropractic mortality data used in this study were derived from Dynamic Chiropractic and "Who Was Who in Chiropractic – A Necrology."

Dynamic Chiropractic was the primary data source for the period from 1990 to mid 2003. "Who Was Who in Chiropractic – A Necrology" was the main source of data for an earlier decade 1969–1979. These two data sets were compared with each other and with similar data on medical doctors and the general U. S. male population.

Because of data limitations the study was restricted to male doctors who were presumed to be Caucasian and who died from natural causes. Because this study sought to determine natural longevity deaths from accidents or other than natural causes were excluded where such

 Table 1 Chiropractic deaths 1990 – present:

 derived primarily from Dynamic Chiropractic. Cause of death is noted within ():

Name	Age at Death	Year of Death	Contributions
Barge, Fred (b)	70	2003	Author, lecturer, educator
Bartlinski, John	76	2001	Trainer to the Baltimore Colts
Bimonte, Harry	56	2003	Palmer College faculty
Birdsley, Sidney C.	80	1999	Pres. Of ACA and Utah Chiro Assoc
Bosma, P.D.	84	2000	Pres. Arkansas Chiro Assoc
Boyd, Bertram	76	2002	
Brassard, Gerald	79	2001	ACA Exec VP
Cleveland, Carl S. Jr.	77	1995	Pres of Cleveland College KC and LA
Croft, George	75	1996	Missouri "Chiropractor of the Year" 1963
De Rusha, J. Lamoine (d)	78	1989	Faculty member Northwestern College
Dejarnette, Bertram "Major"	92	1992	Developer of SOT technique
DiBeneditto, Jack	62	1996	•
Dintenfass, Julius	86	1997	First chiro license in NY state, author
Fleischmann, George	78	1990	
Flynn, John	66	1991	Member first Louisiana Board of Examiners
Georgi, Otto	92	1999	
Grassam, Ian (c)	57	1999	Board of Trustees, Life College
Grostic, John (a)(c)	46	1995	Director of Research, Life College
Hinton, Gerry E (c)	69	2000	Served in Louisiana State Senate
Hinton, Herbert E.	80	2000	3X Florida Chiropractor of the Year
Hinton, Kelly	34	1995	·
Hulsebus, Robert L.	74	1995	
Humber, T.O.	80	2002	
Janda, Vladimir	74	2002	
Johnson, Bryce	66	1993	
Kale, Michael	61	2001	Author, lecturer
Keys, Wilfred	74	1999	On staff at Spears Chiropractic Hospital
Kieffer, Harold J.	72	2000	ACA Board of Governors
Latimer, Louis P. (c)	62	1999	Served on NBCE
Lee, W.C.	85	2000	Co-Founder of Activator Methods
Martin, Lonnie (b)	44	1993	Pres. Elect New Mexico Chiro Assoc
Matz, Conrad Jr. (c)	66	1997	
Maurer, Edward L.	66	2003	Prominent ACA leader, radiologist, author
Mendoza, Herberto C.	67	1999	· ·
Miner, B. Franklin	86	1994	Educator at LACC
Parker, James W. (b)	77	1997	Founder Parker College, lecturer
Price, Galen	87	2000	4th Pres, Palmer College
Reaver, Herbert R "Chap" (b)	87	2000	Columnist for Dynamic Chiropractic
Reaver, Herbert Ross	93	2000	"Most arrested chiropractor in history"
Rehm, William	76	2002	Founder Assoc. for the History of Chiropractic
Rhodes, Walter	65	1998	Pioneer of chiropractic consulting, author
Sabia, Michael	88	2003	Helped pass New Jersey licensing law

Table 1 Continued

Name	Age at Dea	th Year o	f Death	Contributions
Samuel, Edmond (c)	70	1992		Member, Oregon BCE, FCLB
Schaffnit, Robert	81	1999		
Schmidt, Ralph	81	1999		Pres ACA 1967-68
Schneider, Lester	77	2003		
Schultz, Paul-Christian	64	1995		Founder, Pasadena College of Chiropractic
Smallie, Paul	86	2000		Author, lecturer
Sportelli, Matthew	68	2001		Composed Palmer College's Alma Mater
Strang, Virgil V.	72	1998		President Palmer College
Thompson, Robert	83	1997		President Canadian Memorial College
Thorp, Doug	44	1996		Faculty Life West
Wolf, Walter B.	88	2002		NCA Council on Educ., (CCE)
Wolfe, John B.	84	1998		Founder and President Northwestern College
Wright, Rex	71	1998		Federation of Chiropractic Licensing Boards
(a) age at death estimated	(b) Heart Disease	(c) Cancer	(d) Hodg	gkin's Disease
Number of Doctors:	55			
Mean Age At Death:	73.3			
Standard Deviation:	12.7			

could be determined. Also excluded were those names where all the necessary death data was not available.

Where known the specific cause of death is listed, otherwise the deaths are considered as being from "natural causes."

The deaths listed in *Dynamic Chiropractic* and "Who Was Who in Chiropractic – A Necrology" reflect a cross section of chiropractors, including educators and association leaders, and many general practitioners from all parts of the U.S. and some from Canada. Even still, it is uncertain whether the deaths appearing in these publications represent a valid sample of all chiropractic practitioners in general.

Further, the amount of chiropractic mortality data available was limited. Nationally there are approximately 2 deaths per 1,000 for people aged 25–44, 7 deaths per 1,000 for people aged 45–64, and 50 deaths per thousand for people over age 64.5 Thus with over 60,000 chiropractors we can assume many hundreds of doctors pass away each year. Only a few of these deaths will be noted in *Dynamic Chiropractic* or other chiropractic publications.

The chiropractic data reflects deaths occurring over several years in order to acquire sufficient data. The medical and general population data reflect single years.

Results

Table 1 provides chiropractic mortality data collected for this study for deaths occurring after 1990 and is derived largely from past issues of *Dynamic Chiropractic*. It is grouped by doctor name, age at death, year of death, and brief notes about the doctors' contributions to chiropractic. Cause of death, where known, is designated at the bottom of the chart.

A total of 55 doctors who died during or after 1990 are presented in Table 1. The mean age at death of these 55 doctors is 73.4 years, with a standard deviation of 12.8.

The causes of death, where known, are most commonly heart disease and cancer, consistent with the general population. Life Colleges had the unfortunate circumstance of having three of their faculty pass away from cancer at relatively young ages: Doug Thorpe at age 44, Ian Grassam at age 57, and John Grostic (46, age est.).

Table 2 lists 67 doctors who died during the decade of

Table 2 Chiropractic Deaths 1969–1979: derived primarily from *Who Was Who in Chiropractic – a Necrology*

Baer, Adam 62 1972 COSCEB officer Banitch, Felix N. 78 1978 Barge, Henry A. 87 1975 Father of Fred Barge Beasley, Harold W. 56 1974 Biron, J. Harry 73 1973 Boisvert, Robert L. 51 1978 Active in Louisiana licensure Busby, Joseph E. 79 1970 Casey, Delphin P. 58 1977 Charlton, F. G. 83 1970 CMCC benefactor and organizer Cook, Harlan W. 50 1977 Elliot, Robert E. 55 1976 Pres. WSCC Elliott, Frank W 89 1976 Broadcaster and state legislator, educator a Palmer Ellitt, Finley H. 76 1971 Englebert, Richard M. 65 1972 Florence, R. S. 72 1970 Garrett, Melvin E. 54 1974 Goldschmidt, Sol 73 1973 Licensure activist for NYS Goldstein, Benjamin 60 1977 Educator at CINY Gonetand Clarance S. 80 </th <th>Name</th> <th>Age at Death</th> <th>Year of Death</th> <th>Contributions</th>	Name	Age at Death	Year of Death	Contributions
Banitch, Felix N. 78 1978 Barge, Henry A. 87 1975 Father of Fred Barge Beasley, Harold W. 56 1974 Biron, J. Harry 73 1973 Boisvert, Robert L. 51 1978 Active in Louisiana licensure Busby, Joseph E. 79 1970 Casey, Delphin P. 58 1977 Charlton, F. G. 83 1970 CMCC benefactor and organizer Cook, Harlan W. 50 1977 Elliot, Robert E. 55 1976 Pres. WSCC Elliott, Frank W 89 1976 Broadcaster and state legislator, educator a Palmer Ellitt, Finley H. 76 1971 Englebert, Richard M. 65 1972 Florence, R. S. 72 1970 Garrett, Melvin E. 54 1974 Goddard, Forrest I. 62 1977 Goldschmidt, Sol 73 1973 Licensure activist for NYS Goldstein, Benjamin 60 1977 Educator at CINY	Baer, Adam	62	1972	COSCEB officer
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CHOUSTEAU CHALENCE 5 AU 1978 POINGEG CONSTEAU CHALC	Gonstead, Clarence S.	80	1978	Founded Gonstead Clinic
				Pres. Of NCA, Co-founder of NCMIC, FCER
Hall, Irving B 86 1971 Helped pass Kansas licensing law				
Hamilton, Dwight E. 84 1974	~			Trespect pass stansas needsing law
·				Founder & Pres. Missouri Chiropractic College
Haynes, George H. 67 1979 Author, Pres. of LACC and CCE	•			
Higley, Henry G. 62 1969 Scientist, educator, author (LACC)				
Kabana, A. Fred 83 1977				Scientist, educator, author (L/RCC)
Keeler, Clyde M. 83 1971 Educator at Palmer				Educator at Palmer
King, Lester M. 72 1976 Educator at Lincoln College	-			
	_			Helped legalize chiropractic in Saskatchewan
Lemly, Charles C. 78 1970 NCA officer				
Loftin, Charles B. 84 1979 Educator at Texas College	•			
Marshall, Lillard T. 79 1970 First Pres. Of NCA				<u> </u>
Martin, Cecil L. 79 1979 Pres. Of NCMIC, ACA officer				
Martin, Clyde A. 72 1977 Pres. Of NCA and ACA				
Martinko, Stephen V. 68 1978 ACA Governor	·			
McCoy, Marvin B. 84 1976	-			10/1 GOVERNO
McPhail, Lloyd D. 76 1971	•			
Mihovil, Marino M. 76 1976				
Mortimer, Levine 58 1975 Author, Educator at CINY				Andrew Education of CINIV

Table 2 Continued

Name	Age at Death	Year of Death	Contributions
Nielson, Hans	92	1977	
Nugent, John J.	88	1979	NCA director of education
Palmer, David D.	72	1978	Pres. Palmer College
Perkins, Ralph E.	73	1978	
Picker, Adolph H.	83	1976	
Riddett, Stanley L.	79	1979	
Rogers, Loran M.	78	1976	NCA/ACA officer, Editor of JNCA, ACA Journal
Rutz, Frank P.	68	1978	
Schwartz, Herman	81	1976	Author, educator in mental health
Sherman, Lyle W.	72	1977	Educator at Palmer
Stoke, John H.	87	1976	Author
Sturdy, Walter T.	84	1971	Co-Founder CCA and CMCC
Surace, Frank A.	67	1977	Educator
Thompson, Ernest A.	85	1976	Authored Chiropractic Spinography
Tiesen, Emil F.	81	1979	
Turek, Otto	84	1978	Educator, business manager at National College
Tweed, Devina C.	59	1979	
Undercofler, J. Clayton	63	1970	
Vladeff, Theodore	71	1973	Radiologist
Warren, Hugh	71	1973	Activist in Texas
Watkinson, William A.	60	1972	Editor <i>Chiro-News</i> , pioneer in orthopedics, Pres. Of NCA
West, Henry G., Sr.	75	1977	Served on NBCE, Idaho Board of Examiners
Weygand, Robert E.	80	1973	501 (00 011 (2 02), 10mile 2 011 0 01 2 1 million
Williamson, Luther J.	87	1977	
Wilson, George A.	78	1969	Published text on Spinatology
Yocum, Clarence J.	67	1977	1 23
Number of doctors: Mean Age at Death: Standard Deviation:	67 74.2 10.5		

1969–1979. Their mean age at death was 74.2 years with a standard deviation of 10.5. Data for this table was derived primarily from "Who Was Who in Chiropractic – A Necrology".

The British Medical Journal (BMJ) published a similar study in 1995 of medical doctor longevity based on obituaries published in the BMJ during that year (Table 3). The mean age at death of medical doctors in the United Kingdom was 75.2 years, SD of 13.4. In the rest of the

English-speaking world, including Canada and the U.S, the mean age at death for medical doctors was 81.5, with a SD of 9.8.6

The BMJ study did not differentiate by gender, which may bias the reported mean age at death slightly higher.

Discussion

For chiropractic care to increase human longevity, i.e., "Adds Years to Life", it would have do so by significantly

Table 3
Medical Doctor Longevity
by Country of Origin and Specialty
(Adapted from BMJ, (313)7072, Dec, 1996)

Country	No. of Drs.	Mean Age at Death
United Kingdom	469	75.2
Ireland	12	80.1
U.S., Canada, Aust., New	27	81.5
Zealand, S. Africa, Carib.		
Europe	22	80.2
Specialty		
Radiology	24	78.1
Hospital Med.	137	77.5
Surgery	91	75.7
Primary Care	192	74.2
Ob/Gyn	22	73.1
Public Health	7	73
Psychiatry	24	70.8
Anesthesiology	26	66.4

reducing those systemic diseases that limit life span. Chiropractors have frequently claimed relief from systemic diseases as diverse as chronic pelvic pain,⁷ Parkinson's Disease,⁸ myasthenia gravis,⁹ chronic otitis media,¹⁰ pediatric asthma,¹¹ pediatric epilepsy,¹² duodenal ulcer,¹³ infantile colic,¹⁴ high blood pressure,¹⁵ and numerous other disease conditions.

Unfortunately, such claims, even those made in refereed journals, are often typified by single case reports, poor study design, or over-interpretation of results.

If chiropractic is going to claim it advances life span it must demonstrate, among other things, long-term changes in the immune system to fight cancer, and relief of high blood pressure for heart disease.

Chiropractors often claim immune system benefits of chiropractic by citing the study by Brennan, et al., which demonstrated increased respiratory burst of polymorphonuclear neutrophils (PMNs) following spinal manipulation. ¹⁶ PMN bursting, however, is a common rapid bodily response to any number of potential outside events unrelated to spinal manipulation. ^{17–20}

For chiropractic to demonstrate that it increases life

span it would have to show that it effectively manages high blood pressure. While Knutson found a temporary drop in systolic blood pressure following a chiropractic adjustment,²¹ similar drops in blood pressure are also found after drinking tea,²² taking a red clover food supplement,²³ meditation,²⁴ and restricting dietary salt intake.²⁵

In a study from Life Chiropractic College West treatment for high blood pressure with chiropractic care showed no long term benefit compared with non-treatment controls. Similarly, a larger study by the Berman Center for Clinical and Outcomes Research also found chiropractic treatment offered "... no advantage in lowering either diastolic or systolic blood pressure compared to diet alone." 27

To date no single quality study has been produced that shows chiropractic spinal care is the treatment of choice, or is even influential, in the long-term management, prevention, treatment, or cure of cancer, heart disease, or any other systemic disease. If chiropractic care cannot materially change the course of these diseases then it is unlikely chiropractic care can be successful in increasing human life span

Because no nationally recognized mortality database categorized by profession exists such data must be derived from other sources. Interpretation of findings in this paper must include consideration that the chiropractic mortality data reported is limited in not including all chiropractic deaths, reflecting as it does only those names that appeared in certain publications.

Conclusions

This paper assumes chiropractors should, more than any other group, be able to demonstrate the health and longevity benefits of chiropractic care. The chiropractic mortality data presented in this study, while limited, do not support the notion that chiropractic care "Adds Years to Life ...", and it fact shows male chiropractors have shorter life spans than their medical doctor counterparts and even the general male population. Further study is recommended to discover what factors might contribute to lowered chiropractic longevity.

By contrast, the claim that chiropractic care "Adds Life to Years ..." does seem reasonable. Any service that significantly increases a patient's mobility, function, sense of well-being, and relief from debilitating symptoms rep-

resents a valuable contribution to health care. That combined with exceptional patient rapport and chiropractic fills a valuable health care niche.

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