

THE EARLY-AGING WORK FORCE

A SILENT EPIDEMIC



A Survival Kit for Hidden Dangers
to Your Well Being

By Hugh Gilbert, P.T.

With Illustrations by Jacqui Green

Foreword by Dr. Tony Lynch, MD, PhD, ACBOM, CIME, MROCC

Copyright © 2013 by Hugh Gilbert

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means without written permission from the author.

Second Edition — November 2013

Published by: The Larry Czerwonka Company
Printed in the United States of America

ISBN: 0615906850
ISBN-13: 978-061590685

Contents

Foreword

by Dr. Tony Lynch, M.D., Ph.D., ACBOM, CIME, MROCC

Preface

A brief outline of how the author came to his current stance on worker education and an introduction to some of the people who provided him with insight.

Introduction

Health care cuts are spiraling globally, worker absenteeism and disability statistics rise steadily, and hospitals increasingly become catchment areas for chronic and often terminal illnesses. As a result, attention is focussing on accountability of individuals for the consequences of their behavior and habits. This approach will eventually affect all of us and we should prepare accordingly.

Chapter 1: The Early-Aging Work Force

This chapter examines the problem of the Early-Aging Work Force in industry and demonstrates how premature “aging” of the work force contributes to worker injury and disability.

Chapter 2: Sit and Feel Good

Some of the postures we use in our work places can unknowingly damage our health; every day postures we take for granted can also be damaging. Sitting is used as an example. A brief history of this posture is offered and some of its harmful effects are discussed. You will also learn how situations develop which may cause you to become a part of the Early-Aging Work Force catastrophe.

Chapter 3: Real Men Don't Breathe Properly!

From early childhood, Western Society does not encourage us to breathe properly. In fact the opposite is often the norm! Recognize the potential harm in this and learn how to implement proper breathing techniques—with almost immediate noticeable benefits.

Contents

Chapter 4: The Big Picture

A specific example from industry shows how the postures required by a person's job may propel you towards injury and disability and can affect your whole life.

Chapter 5: Disabled While You Sleep?

A sleeping position may set a background for injury at work, and conversely, your work may be responsible for your sleeping positions.

Chapter 6: Carpal Tunnel — A Twist of the Wrist?

A definition and explanation of what exactly is Carpal Tunnel Syndrome. Learn how Carpal Tunnel Syndrome develops and how to identify the risks in your occupation. Prevention techniques are offered for both your home and your work environments.

Chapter 7: Prevention — A Band-Aid Solution?

How to use a simple proven biofeedback technique to increase personal awareness of harmful repetitive or sustained wrist postures.

Chapter 8: Don't Stick Your Neck Out!

Various case studies of injured workers, whose injuries demonstrate the need for you to be more aware of your neck posture. Also a discussion of some of the problems you will encounter because of lack of awareness of this issue and a further lack of education in the benefits of maintaining safe neck posture at work and at home.

Chapter 9: So What's The Problem?

What is actually happening to your body when problem neck postures are neither identified nor addressed? After reading this chapter, the reader will be in a position to confidently discuss these issues with employers or physicians.

Contents

Chapter 10: **Where Did These Problems Begin?**

Many of the problems we see in the work force are actually well entrenched by time we were age 16, and we need to consider how essential prevention is in the schools.

Chapter 11: **The Chin Tuck**

A simple preventative exercise to minimize potential neck problems and a review of an actual project in an industry where this exercise proved effective.

Chapter 12: **Just Grit Your Teeth and Keep Going . . . and Going . . . and Going**

Repeatedly clenching or grinding your teeth can cause havoc with your body and significantly increase your level of fatigue and consequent risk of injury. Steps to take for this problem and a simple preventative exercise.

Chapter 13: **Stress Out — Burn Out**

Reminders of the distinction between the values of positive stress and the effects of negative stress, and of the importance of finding productive coping techniques.

Chapter 14: **The Long and the Short of It**

Many physical problems can be caused by stress on muscles and ligaments because you apparently have one leg longer than the other!

Learn the differences between a true and an apparent leg length difference, and gain confidence to discuss this issue with your physician or other health professionals, and insist on proper treatment to resolve either problem.

Contents

Chapter 15: **Check It Out**

Failure to report early symptoms or failure to find a physician who will respond to these symptoms can have a disastrous affect on your life. An actual case history is used as an example of the consequences of untreated problems. Some simple range of motion checks are offered to warn you of potential problems in your neck and back.

Chapter 16: **M. V. A. Pain: Here-to-Stay Pain?**

Injuries sustained in a motor vehicle accident are not always given due consideration, and some unrecognized problems can prolong the period of recovery. Psychological issues may be present which would also benefit from recognition and attention.

Chapter 17: **Just What Are You Fit For?**

A functional capacity evaluation is used to determine the capabilities for work of those considered unfit to return to their former occupations.

This chapter clarifies what this process entails and re-asserts why early intervention might have prevented the need for such a procedure.

Chapter 18: **The Good, The Bad, and The Just Plain Ugly!**

Various attitudes existing in industry towards injury reduction. Which category does your employer fit? You, the individual, may be the only one who really cares about your well being, so determine to implement personal injury-prevention techniques in your life.

Chapter 19: **Corporate Cooperation**

For management in industry, a step by step framework for implementing the lessons in this book, including quality assurance and ongoing vigilance in injury prevention.

Contents

Chapter 20: **Early Intervention**

A review of what should be the joint philosophy of both workers and management. Only combined cooperation and early intervention can produce lasting results

Author Profile

Preface

This book is the culmination of almost 50 years of experience, first as a student and then as a health care provider. The following people have all been mentors to me, giving me further insight into the cause of injury and disability, not only on the physical level as addressed in this book, but also those who gave insight to care of mental, emotional and spiritual imbalances as part of true healing.

This book was originally self published in 2001 and I thank Larry Czerwonka Company for taking it on board now in 2013 and publishing it. Some of the references therefore are not in terms of today's statistics but the lessons to be learned as as valuable and necessary to the health and wellbeing of the workforce today as they were then.

To recap, firstly I would like to honor Mr. Bill Kinloch P.T. for founding the Scottish Physiotherapy Hospital in Corunna Street, Glasgow, Scotland. He was certainly a man who could be classified as being ahead of his time in the field of Rehabilitative Medicine. His views on kinetics and body mechanics are the foundation of my work. W.H.Fahrne's publications on back care took me further down the road. Dr. M. Rocobado's teachings gave me another piece of the puzzle. Glenda Key P.T. C.E.O. of Key Functional Assessments in Minneapolis, really tied the whole thing into industry for me. Erl Pettman P.T. of Abbotsford, British Columbia, was, to my mind, one of the finest rehab practitioners in North America, and again, was responsible for my ongoing understanding of the kinetic chain. The authors, Robin Sharma, Napoleon Hill, and Dr. Cal Botteril, National Sports Psychologist, were all instrumental in teaching me how to organize and balance the priorities in my life. Kudos to Randy O'Hare, and Dave Brooks of Ipsco Steel, and Rick Cunningham of T.I.W. Western for their vision and proactive attitudes in implementing ground breaking programs for worker safety. Jeff Fraser, of Canada Post deserves mention for giving me the opportunity to develop my educational program in industry and for supporting me throughout its implementation. To my friends, Leslie Demytruk R.N. in the insurance industry, Mary Mac Gregor P.T. a senior rehabilitation consultant to the Worker's Compensation Board of Alberta, John Rahman, a leading light in orthotics in Calgary, and to Dr. Tony Lynch, Occupational Health

Physician, also of Calgary, for his friendship, intuitiveness and informative foreword to this book, many thanks. All of your support and advice has been invaluable. Then there is John Barnes, P.T. whose groundbreaking work in Myofascial Release has completely changed the approach to rehabilitative medicine. Learning this highly skilled craft has been an inspirational journey. My thanks to Kevin Matthews, of Sarnia, Ontario, whose ongoing efforts to educate industry in the effects of fatigue on the workforce, are truly informative and inspiring. To Jackie Green, whose artistic graphics have captured the essence of this book, I extend my thanks and admiration. I know that readers will agree that this young school girl has a unique talent and her future in this field is bright indeed.

To Herman Mueller, Australasian Institute Director, your teachings on human kinetics and psychosomatic therapy should be taken by everyone in rehabilitative medicine.

To my Hawaiian mentors, Rebecca Avery; Papa K; and Kanoa Okalani thanks for holding the light for us all. To James Twyman, thanks for all you have brought to the banquet in the quest for World Peace .To Clay Miller, shamanic visionary from Sedona, Arizona, and Simone Awinha, from Amsterdam, Internationally acclaimed singer, and stage artiste, who have both brought so much clarity and true friendship to me, my deepest thanks.

To my dear friend, true healer, therapist and colleague Mary Felling P.T. of St. Louis, your true friendship and outstanding skill and empathy are just some of the many gifts you bring to my world, and the world of so many others.

And, lastly, to my life and business partner, Jane K. Wardlaw, who has seen me through some tough times with unquestioning support and empathy and who is now finally opening to (and being acknowledged by many for) her own deeply compassionate spiritual healing power and also her powerful warrior energy in balance. It has been a time of vision and wonder together and I will enjoy the rest of the time we have on this path.

This book is dedicated to all of those mentioned—and all I have not recalled—in this preface. I hope that I have met your expectations!

With Thanks and Blessings to you all,
Hugh

Introduction

Many physical complaints and illnesses, often requiring extensive and costly treatment, are now being closely scrutinized, with the potential for increased health care costs to each individual glimmering on the horizon. In the foreseeable future, those who are grossly overweight, with no genetic predisposition; those who abuse alcohol or drugs; and even those who do not exercise regularly, may be held responsible for payment of a large portion of their own health care costs for treatment of conditions incurred as a consequence of their lifestyle. Particularly for smokers, in centers of government and among insurance providers, the idea is evolving rapidly and with growing conviction, that smokers should be responsible for payment of a large portion of their own health care costs. The rationale is that those who smoke are guilty of deliberately inhaling toxins on a regular basis. These toxins have been proven to damage the human body and predispose it to suffering and disability from severe and often fatal lung and heart conditions. The cost of providing care for these conditions is staggering; therefore, the plan is to increase the health insurance premiums of smokers first, to help defray the cost of treatment, and, secondly, to act as a deterrent to smoking for all of society. What this means is that at least for smokers, the individual is now becoming accountable for his or her own health. Health care will no longer accept the full impact of cost for conditions which could possibly have been prevented by a change in living habits.

Our health care systems are overloaded and the emphasis must shift to prevention, by encouraging lifestyle change and accountability. Governments strive to find solutions to spiraling unacceptable cost of treatment. An example of this occurred a few years ago in the United States, where motorcyclists have been lobbying against legislation requiring them to wear helmets while riding their vehicles. The bikers argued that it should be up to each individual whether they wore a helmet or not. The governments of various states apparently agreed with them, but have decided that, should a motorcyclist incur injury from not wearing a helmet, the state is not prepared to bear the cost of treatment. Consequently, bikers were only allowed to ride without a helmet if they could prove that they have adequate health insurance care coverage.

Concern is not confined to governments and health care providers. Many individuals have become increasingly angry that they have to share in the cost of health care for others who knowingly did little or nothing to prevent the problems. For a few years, we had a “Participation” campaign in Canada.. As a physiotherapist, I applauded the federal government’s initiative of that extensive advertising campaign to encourage us all to exercise regularly. This premise collapsed, however, when someone who exercises on a regular basis sustains a “sports injury,” meaning sustained time off from work, only to find that he or she can encounter great difficulty in obtaining prompt government-funded treatment of the problem. These people, who have made a conscious effort to stay fit; know that doctors’ offices and emergency rooms are filled with a high percentage of patients who have a history of smoking, drug or alcohol abuse, or lifestyle induced obesity, and, therefore, it would seem that those who do not participate in a healthy lifestyle have priority with our health care funding. This is a mixed message we are currently receiving, and the changes on the horizon would appear to be not only practical, but probably long overdue.

The recognized Health care systems in the UK and the USA in particular continue to fail the public and the latest strategies like Obamacare are similarly doomed unless prevention becomes the priority.

While we may or not agree with these sentiments, there is no doubt that the movement towards individual accountability is gaining strength in many countries today and will have a direct impact on each of us and our families in the not too distant future.

It is generally agreed that “bad posture” is a cause of many injuries for which industry, and society as a whole currently bears the cost.

I don’t believe in the term “bad posture.” In fact, as you will see, the classic military posture of stand up straight, shoulders back, chest out etc is the only true “bad” posture! All posture is simply an adaptation to the stresses being imposed upon the body, so I prefer to use the term Poor Posture as opposed to Bad Posture. Many back injuries can be prevented by use of improved posture. Many neck injuries can similarly be avoided. A high percentage of carpal tunnel syndrome injuries can be completely prevented by the implementation of postural awareness. Proper breathing techniques, practiced regularly, can reduce many bronchial problems and prove beneficial in stress reduction. These are just a few examples where taking responsibility for ourselves would serve us well—especially if we may be held

more personally accountable in the future. However, simply saying “watch your posture” is not enough. The causes of those postures need to be identified and diminished, then simple how to tools are needed. Both are provided in this book.

Industry is currently being pressured to recognize the effects of the work environment on its work force, and to make the necessary ergonomic changes in an effort to achieve a decrease in worker injury and disability. As far back as the summer of 2000, the Trade Union Congress (T.U.C.) of Britain, a powerful and influential organization with a membership of over 20 million workers, passed several initiatives to identify hazards in the workplace. The T.U.C. has full government support to make employers more accountable for worker safety.

The T.U.C. also planned to send all members a “body map,” an outline of the human body. The plan was for each worker is to mark the areas of his or her body which are painful at the end of each work day. By comparing the *body maps* submitted, managers or medical practitioners from each industry will be able to identify problem areas where symptoms are common or recurrent. With this information available, employers can begin to determine the causes of these ailments and then implement changes to reduce them.

This plan is a huge step forward in work place health and safety, and one which is to be applauded, but which only provides part of the solution. What will inevitably happen, is that workplaces will come under stern scrutiny and many changes will be made. The spotlight must then reverse from the workplace to the worker and the same probing questions will be asked about how fit a worker is to do his or her job and what measures that worker is taking to ensure his or her body is in optimum condition to minimize risk of injury.

In summary, workers will be held accountable for their lifestyles and they will have to drastically reconsider obligations to themselves and others. The responsibility for our own health ultimately lies in our own hands. This is gradually being accepted, and there will come a time when we will be held accountable as individuals for our postural habits, just as smokers are starting to be held accountable today. How would you feel if you were told that your health care premiums were about to increase dramatically because you or one of your children had sustained an injury which could have been prevented by correct posture? This may seem laughable, but many injury claims today are being denied benefits because a pre-existing condition has been found to

have contributed to the injury. This in itself is an obscene decision as almost everyone has a pre existing condition of some kind, however it is the current sad reality we have to deal with. It is only a matter of time before poor posture, with all of its ramifications to your body, will be scrutinized as a pre-existing condition, so the potential for increased personal accountability is not as far fetched as some of us might have thought.

Most of us have generally felt quite comfortable with our posture. Some of us have known we have poor posture, but really haven't considered doing much about it. Sure, parents and teachers often told us to quit slouching and sit or stand up straight, but it never really felt comfortable to sit or stand in this manner, so we didn't give it more than a passing thought.

The problem of poor posture was two- fold. First, some of the people encouraging us to use "correct" posture were misinformed as to what correct posture entailed. For example, not so long ago, school girls were given extra marks in typing tests if they sat properly. The posture for sitting consisted of tucking their feet under their chairs and always, particularly for Catholic schoolgirls, as a matter of strict principle, keeping the knees tightly closed. The cumulative stresses of this *correct* posture on the ankles, knees, hips and low back of the children resulted in a multitude of problems in later life. Often individuals were not aware of the slowly evolving, far reaching consequences of the postures which they regularly used. It doesn't seem fair that they weren't aware they were creating a problem but now are being held accountable, does it? Many injuries could have been prevented if more time had been taken to educate workers and employers on the benefits of good posture and on the cumulative and expensive cost of improper postural adaptations to the work and social environment.

Thousands of people are finding themselves in chronic pain and either unemployed or under-employed, because of cumulative or repetitive injuries which in many cases were totally avoidable. A horrendous and extremely sad scenario is being repeated all too often throughout the industrial world. It is one which has to be addressed immediately if we truly care about our own well being as well as the health of our families, friends, and colleagues.

This book has been written to offer insight into the misconception of correct posture, to give an understanding of what is really causing your "normal" aches and pains, and to offer simple corrective measures. The knowledge gained will enable you to discuss these matters confidently with

your family, co-workers, physician, or employer and to enact or demand the changes necessary to improve your health and well being.

Chapter 1
The Early-Aging Work Force



Well before the turn of the century I began to realize the impact of the unseen epidemic I named *The Early-Aging Work Force* and its relevance has only grown in the Millennium. The information offered here is of paramount importance not only to the Baby Boomers, but to Generation X'ers and beyond. The impact of an early-aging work force affects not only our huge and diverse work force, but also our children in primary and secondary centers of learning on a massive scale as you will come to grasp for yourself as you move through this book. However, you will also come to see how simply it can all be reversed and prevented if we just go to it together.

By the time you have finished this manuscript, you will easily understand how *The Early-Aging Work Force* relates to your life and be well prepared to avoid the causes almost completely. You will also have gained the knowledge and ability to assist your spouse, children and colleagues in having the same skills. The benefits of a healthy, educated and motivated work force will also save incredible amounts in health care costs throughout the industrial world, lowering the costs of your health care and hopefully, as a consequence, the goods and services you purchase!

We are all aware of the inadequacies of our current health care systems and the fiscal pressures on them, and, as industries continue to reduce the size of their work force in effort to achieve increased efficiency. We are all expected to "Do more with less." Physical and mental stresses are spiraling in our work force and burn out is becoming the norm instead of the exception in many industries. Phrases like Repetitive Strain Injury, Cumulative Trauma, Chronic Back Strain,

Stress, Depression and Carpal Tunnel Syndrome have become commonplace. The result is an increasing number of disabled workers. Sadly, most of these workers have accepted their plight as unavoidable and believe their pain and decreased quality of life are simply the by products of aging and/or years of physical labour. Unfortunately this attitude is often reinforced by the opinions of the workers' medical advisors, often even their physicians. In truth, the problem is that the workers' needs are not being properly addressed by the present health care systems, particularly in the areas of rehabilitation and prevention of musculoskeletal disorders. Many workers go through the recognized expensive medical rehab modules not once, but several times, yet still suffer varying degrees of pain and disability. It is my firm belief that many of these cases are **preventable**, while others, if caught in a reasonable length of time, are completely **reversible**.

There is growing evidence that the work force is not satisfied with the inadequacies of our Health Care System and are looking elsewhere for solutions to their problems. In the magazine *Newsweek*, an article entitled “What’s Alternative” (November 23, 1998) stated that in 1998 more than 83 million people sought alternative treatment and that 629 million visits were made to these practitioners as compared with only 390 million visits to primary care physicians. These numbers alone are compelling evidence that people no longer accept the quality of health care provided to them and are seeking alternative solutions in ever growing numbers. The trend has only continued and still the message doesn’t seem to sink in for some that the current viewpoints on disability and aging are not being accepted any more!

While seeking alternative care is understandable and in many cases successful, it is still a desperate attempt on the part of many people to find someone who can *fix* them. When they do find such a practitioner, they become aware that in many cases they themselves have been (unknowingly) part of the problem due to the postures of their chosen lifestyle, and they come to realize that their recovery is as much dependent on their awareness and willingness to change, as it is on the treatment they are receiving. In other words, the individual is recognizing—usually gladly!—accountability for his or her actions!

In the following chapters you will come to see how your normal aches and pains are not only abnormal, but in many cases **fully avoidable**, without changing your occupation.

No occupation is exempt from the hazards of the early-aging process, and poorly chosen physical fitness programs and sports can actually **increase** the incidence of disability. It is vital that you come to understand how to gain control over the symptomatic aging process in your life. We all know that we are getting older, and that aging is a normal and unavoidable process. However, it must be understood that many of the symptoms of aging in the musculoskeletal system are products of postural adaptation to work and social environments, resulting in decreased mobility and function. This erodes your quality of life, and in many cases makes you more susceptible to acute or chronic disability, creating the problem which I define as “The Early-Aging Population.” I hope that you will enjoy this book, apply the information offered, and experience dramatic improvements in your quality of life.

A classic example of aging without losing capabilities is seen annually at the Iron Man in Kona, Hawai‘i. . . . Sister Mary crosses the finish line under the time limit annually and she is a little catholic nun in her late seventies! What an example to us all. Does that mean we have to be fitness fanatics? If you wish, then go to it! However, for me it shows me how we need to reject the preconceived filters we have in our head—and our society—then discover and eliminate the real causes of our decreased capabilities.

What do I mean when I refer to the category of *The Early-Aging Work Force*? To clarify this concept and show how it evolves, let’s say, you, a good worker and valued employee, are injured and have to be off work for a period of time. Most employers and supervisors will wish you a speedy recovery and welcome you back with open arms. So all goes well for a while and then you have a recurrence of your former problem, which again, eventually necessitates time off work. Once more, management is still generally sympathetic, although this time they hope that you “really get fixed up,” and in fact often start offering their own remedies if they feel the care you are receiving is inadequate! Grateful for all the help and support, you once again recover and return to your employment. Three months later, oh no! Here it comes again! Desperately, you try to hide the pain and discomfort and try to continue to fulfill you obligations to your employer, your family, and yourself. Ultimately, your performance suffers and you are once again forced to be off work. While your own fear and frustration are growing, along with your discomfort, the management view has often shifted from one of support to one of frustration, sometimes still tinged with sympathy. They feel while you are still an experienced, knowledgeable worker, you are no longer capable of performing your required tasks, and therefore are becoming a liability to their organization and may have to be replaced. Your chronic back, neck, shoulder, elbow, wrist, or chest infection has just made you a part of the *Early-Aging Work Force*! Your future can now become unclear and bleak in a real hurry! Your employer, too, is facing increased costs in the form of Worker’s Compensation or Disability costs, possibly loss of productivity, increased overtime costs for other employees plus training of other individuals to fill your shoes. Your physician can also become frustrated as he or she tries to solve the ever tightening circle of pain and disability. If you belong to a trade union, it will generally fight for your benefits and try to find you alternative employment, but this can, unfortunately, often be a prolonged and bitter battle. The point is you are

facing a loss of income, and perhaps a premature early retirement, often with minimum pension. And in so many cases, if the worker and management had understood the concepts contained in this book, none of it would have happened!

This does **not** apply only to those who have been doing the same job for over 20 years. Some of the actual cases you will read about have only been doing their particular type of work for less than two years, some only twelve weeks! Imagine being forty- five years old and considered to be part of the *Early-Aging Work Force*. A scary concept. Then consider being twenty years old and given the same label! Now that's terrifying. Not just for the individual, but for the future of Health Care in this nation. The point is that this epidemic is a virtual reality, and it has been my experience that we are losing many of our best and most valued workers in every trade and profession throughout the country. Postural Adaptations are a **huge** factor in this scenario, and I believe the workers themselves are the driving force who can and will ultimately turn this around. The work force is **not** a disposable commodity. They are, for the most part, a dedicated, conscientious skilled and practical group, the virtual lifeblood of our commerce, vital to the functioning of industry, who will implement changes to improve their health **if** the changes make sense to them. That is why I am confident that, if these concepts are clearly defined, those who read them will implement the preventative measures, and, when the benefits are realized, will in fact take responsibility for teaching others.

Management must also realize the *Early-Aging Work Force* is a real phenomenon. They are aware the current costly methods of care have not solved the problem. They too can and will examine and use the principles of change advocated here, because they will come to realize that these principles will benefit their personal lives as much as their employees', with obvious benefits to the personal and corporate environment.

So the *Early-Aging Work Force* has come about primarily and simply as a result of postural maladaptations we have unknowingly made in our homes and work environments!

In Chapter Two we will look at the first obvious example of a major cultural adaptation to a detrimental posture, one for which the cumulative effects are well known.