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**The Marriage of Exercise Physiology and Medicine**

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The United States spends more on healthcare than any other nation in the world, yet it ranks poorly on nearly every measure of health status.

-- Steven A. Schroeder, M.D. [1]

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| Medical error is a leading problem of health care in the United States. Each year, more patients die as a result of medical mistakes than are killed by motor vehicle accidents, breast cancer, or AIDS.  -- Nancy Berlinger  *After Harm: Medical Error and the Ethics of Forgiveness* [2] |

his article is about the professions of exercise physiology and medicine. Clearly, medicine is all about patients, everywhere, all the time. The growth of medicine is obvious, and it is remarkable in both big investments in technology and care. Patients want real-time interaction, whether during an office visit or a longer period of time in the hospital. The growth of healthcare is likely to skyrocket in just a few years (given the epidemic states of obesity, depression, and the aging population). Yet, it’s pretty clear that little is changing, regardless of the powerful devices with fancy keyboards.

Think about it. It was just a little over a decade ago the Institute of Medicine (IOM) issued a report that identified ~100,000 medical errors in the United States each year. If that number doesn’t get your attention, then consider this. At the time, it was more than breast cancer or motor vehicle accidents. The truth is that there are excellent estimates of millions harmed each year by errors such as performing the wrong surgical procedure, giving the wrong medication or dose, or using contaminated medical equipment [3].

Think about all of the benefits, both mentally and physically, of regular exercise. It is pretty hard to argue that exercise isn’t medicine. In fact, in many ways, a properly prescribed exercise program is the next version of medicine. It brings together the potential of an enduring mobility and the familiarity of a world beyond the desk and chair that so many people are held captive. The ASEP leaders think there is a huge opportunity to bring the best of both worlds together (i.e., the productive work of board certified exercise physiologists and medicine).

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| The philosophy of the Board Certified Exercise Physiologists is rather simple, “The client/patient gets what he or she works for.” It is possible to learn how to eat a moderate amount of food. It is possible to engage in regular physical activity, whether it is at work, in school, or in the community. |

For sure, the marriage between exercise physiology and medicine is all about connecting with the people through solid, scientific information to help them live a healthier lifestyle. It is not about building big muscles for the sake of appearance, and it certainly isn’t about the bottom line in hospitals all across the United States. With that in mind, it is all about making the most relevant exercise healthcare information easily accessible for all clients and patients. Here’s hoping that exercise physiologists and medical doctors will acknowledge the need to come together on behalf of the American people.

Even if exercise cannot do much to change genetics, it can match other established treatments in regards to behavioral patterns and even certain social circumstances. Exercising 15 or even 30 minutes three times a week can produce a quieter world with less anxiety, stress, and depression. The noise around the client’s everyday existence fades into the background when he/she learns and discovers the new feelings, depths, and subtleties with exercise. It is likely the single greatest opportunity to improve health and reduce premature deaths from obesity and physical inactivity.

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| Using exercise today to improve the health of the public is not without risks to clients and patients. Hence, exercise is an interesting paradox (given that it is like any other medicine). Properly prescribed, it can be beneficial to one’s health. But, when used wrongly, it can cause harm and even death. Today’s healthcare concerns, technology, and the latest real-time scientific trends demand dictate that exercise isn’t just exercise, but instead exercise is medicine. Therefore, it must be prescribed by qualified professionals. |

But, it is important to remember that the three easy payments of regular exercise depend on sustainable behavioral changes. That is, experience demonstrates that it is just as problematic to access the help of an instructor or trainer as it is the physician who isn’t interested in reducing or preventing medical errors. The prevalence of both in the United States isn’t a good thing. Unfortunately, many unsuspecting individuals who want to get healthier find themselves caught up in the strategic and savvy business mechanics of trainers. Then, too, there are individuals who want to lose body fat share their time and money with high-class medical teams that employ strong methodologies to keep clients/patients spending more of their hard earned money.

Since life is about negotiating ideas and ways of living, why not spend a great deal of time negotiating in health matters (particularly as they relate to our personal lives and the game of life)? There’s no place like living in a healthy mind and body, especially if you don’t have one! Imagine if you had the ability the “connect” to the right team of professionals to increase your health status. Imagine if you didn’t need to depend on high-costs medical-technology, but rather your own ability to hold the course to fewer headaches, backaches, disabilities, and diseases. Imagine the power to avoid health-compromising conditions for responsible and proven benefits of regular exercise. It would not only reduce healthcare expenditures, it would improve your health.

Well, the ASEP bottom line is this: At the beginning of the 21st century, the leadership understood that the safe and professional application of exercise as medicine required credible professionals. Those professionals are known as “Board Certified Exercise Physiologists.” The objective was then (and still is): (1) to improve career opportunities for exercise physiologists; and (2) to protect and promote the public’s health. The latter factor is problematic for many reasons, particularly by problems such as obesity, health disparities, social and cultural considerations, and unqualified individuals in the fitness industry.

Health is important from both the personal level and the community at large. It is therefore necessary that the “person” who oversees and/or directs others (whether in the gym, playground, hospital owned facility, or exercise physiology health and fitness clinic) with the expectation of improving health, wellness, and fitness does so with the knowledge and concerns that undergird the process. That process is one of engaging and collectively applying exercise specifically as a medicine. Unlike nonprofessional exercise instructors, the EPCs (i.e., Exercise Physiologist Certified) have a professional credential that allows them to prescribe exercise as medicine.

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| There is something fundamentally right and honest with a degree program that is entirely ethical, truthful, and honest with the students. That something fundamental and powerful is understandably the message of professionalism that everyone in healthcare is responsible to. |

The ASEP leadership believes that the best way to efficiently coordinate and reduce any problems that may associate with prescribing exercise to improve public health is to identify a real exercise professional. Hence, healthcare entities should hire EPCs and not personal trainers or so-called exercise specialists. There are plenty of entrepreneurs in healthcare, business, and the public health infrastructure that agrees with this thinking. The point is, a good looking male or female body isn’t enough (and it never was). To shift behavior from the professional to the client and to do so safely and responsibly requires a host of converging factors, including but not limited to, the right college education, certification, cardiovascular assessment technology, and laboratory training.

Leadership training, support, and professional development must become a high priority for all departments that offer an academic degree in exercise physiology. A formal national dialogue must be initiated between select members of exercise physiology and medicine to address the specific issues of credentialing. The President of ASEP should provide leadership to promote and facilitate the development and implementation of the Exercise Physiologist’s Code of Ethics [4] and Standards of Professional Practice [5]. Academic exercise physiologists must be held accountable for assessing the state of the so-called exercise physiology degree program, and its capacity to provide the right kind of healthcare essential to public health services by exercise physiologists. This assessment should identify strengths and gaps and serve as the basis for plans to accredit the degree program and assure its sustainability.

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| Simply Natural, Naturally Right, Simply Smart – Board Certified Exercise Physiologists! |

ASEP, in collaboration with the medical profession and other established healthcare professions, should work towards inter-organizational collaboration on health issues. In particular, it is crucial that the entrepreneurial spirit within exercise physiology is supported and effectively coordinated both academically and among other healthcare professionals [6]. This means that collaboration on such issues as the “exercise prescription” is understood, improved upon, and supervised by EPCs [7].

Academia must provide the exercise physiology degree by “title” and not inference. It must also provide continuing education for all EPCs in support of the ASEP efforts to do so. Academic institutions must develop criteria for recognizing and rewarding exercise physiologists who go the extra mile to strengthen the ASEP public health agenda and vision [8]. By tracking the comprehensive and affordable “exercise medicine” healthcare available to everyone residing in the United States, exercise physiologists will help to close the gaps in efforts to assure the health of the population.

***The ASEP Healthy Advantage:*** The intellectual energy of the organizational members combined with the leaders’ passion to nurture and grow the profession of exercise physiology is an incredibly powerful mix that makes the future marriage of exercise physiology and medicine possible.

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