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FEATURE

**D.A.M.S: INTRODUCTION TO A DISRUPTIVE AGING
PARADIGM FOR STRENGTHENING LONGEVITY
AND IMPROVING QUALITY OF LIFE**

William C. Andress

***Abstract.** Starting with the gloomy picture of the aging process as penned by Solomon in Ecclesiastes 12, this theoretical paper challenges commonly held beliefs based on life expectancy tables that the last decade of a senior's life is destined to be an existence spent in distress, disability, diminished faculties and a declension in the overall quality of life. Based on habits of longevity as identified by various researchers, the D (Diet) A (Activity) M (Mental attitude) S (Social/Spiritual connectivity) paradigm is introduced as a conceptual model founded on biblical principles and validated by current scientific research, for the promotion of an extended life filled with higher quality throughout the golden years.*

Keywords: aging, life expectancy, lifestyle, longevity, quality of life, seniors, spirituality

Introduction

From the time that the Spanish conquistador, Ponce de Leon, first explored the Florida peninsula in 1513, the search for an eternal "fountain of youth" has remained elusive, despite the fact that in developed countries, age expectancy at birth has almost doubled since the beginning of the 20th century. More and more countries are witnessing their populations reaching the "threescore years and ten" spoken of by Moses in Ps 90:10.

As an example, 14% of the population in the United States is currently above the age of 65, a figure that is expected to increase by 50% within the next 25 years (Administration on Aging— United States Department of Health and Human Services, 2016). In 2015, more than 14,000 beneficiaries were added to the Social Security retirement payroll every day (Social Security Administration, 2016). Based on current demographics, it is expected that by 2030, there will be close to 1 billion people over age 65 globally (He, Goodkind, & Kowal, 2015). Asia will take the lead in both the rate and the size of aging populations with Japan, Singapore, Macau, and Hong Kong being at the forefront of regions with the highest life expectancies (He et al., 2015). On the other hand, the Philippines continues to be a fairly young country with over 50% of the population under the age of 25 and just 4.38% of the population over the age of 65 (Index Mundi, 2016).

However, increases in longevity do not frequently correlate with quality of life. Health age life expectancy (HALE) tables show on average, a 10-year discrepancy between the onset of diminished quality of life and the final termination of life (World Health Organization, 2016). The physical and mental challenges presented in an aged population are poetically described in Ecclesiastes 12. Using this passage as a framework, this theoretical paper seeks to disrupt commonly held views of aging, by presenting a Biblical ideal increasingly confirmed by emerging research supporting an aging-well paradigm encapsulated by the acronym D.A.M.S. (Diet, Activity, Mental attitude, and Social/Spiritual connectivity). The concept of longevity as a biblical ideal, aging curves potentiating a “square-edged existence,” and recent research validating the D.A.M.S. paradigm are all explored in greater detail.

Solomon’s Ecclesiastical View of Aging Confirmed by Science

Some 900 years before the birth of Jesus Christ, a writer traditionally understood to be King Solomon, penned a rather gloomy portrait of the aging process as recorded in Eccl 12:1-8 (*Good News* translation used throughout except where otherwise indicated).

“So remember your Creator while you are still young, before those dismal days and years come when you will say, “I don’t enjoy life.” [Feebleness with its infirmities and disabilities resulting in diminished enjoyment.]

That is when the light of the sun, the moon, and the stars will grow dim for you, and the rain clouds will never pass away. [Dulling of the natural faculties with increased depression.]

Then your arms, that have protected you, will tremble [Parkinson’s disease], and your legs, now strong, will grow weak [Arthritis/Osteoporosis]. Your

teeth will be too few to chew your food (Periodontal disease), and your eyes too dim to see clearly [loss of sight].

Your ears will be deaf to the noise of the street. You will barely be able to hear the mill as it grinds or music as it plays [loss of hearing], but even the song of a bird will wake you from sleep [sleeplessness].

You will be afraid of high places, and walking will be dangerous [loss of balance; prone to falls]. Your hair will turn white; you will hardly be able to drag yourself along [loss of strength], and all desire will be gone [sexual impotence]. We are going to our final resting place, and then there will be mourning in the streets.

The silver chain will snap, and the golden lamp will fall and break [diseases affecting the brain and nervous system]; the rope at the well will break, and the water jar will be shattered

Our bodies will return to the dust of the earth, and the breath of life will go back to God, who gave it to us [ultimately we die].”

Then he exasperatingly concludes, *Useless! Useless! It is all useless.*

Whether from personal experience, or simple observation of the aging process, the writer’s description is a superb poetic allegory of old age. Perhaps this dismal view was influenced by another author who years earlier wrote, “*Do not reject me now that I am old; do not abandon me now that I am feeble.*” (Ps 71:9).

With the passing of millennia, little has changed. The ecclesiastical portrait is an apt depiction of life for too many seniors today. Diseases such as Parkinson’s, osteoporosis, arthritis and periodontal diseases are generally markers of advancing age. Consider the following statistics for the United States:

Among all age groups, falls resulting in unintentional injury are highest in the 65 and older group (Centers for Disease Control, 2013). Fifteen to 20% of older adults have experienced depression (Geriatric Mental Health Foundation, as cited in Ginsberg & Digillio, 2016). Frequently, depression is an underlying cause of suicide. “In 2014, the highest suicide rate (19.3) was among people 85 years or older” (American Foundation for Suicide Prevention, 2016).

Since the beginning of the 21st century, arthritis and other rheumatic conditions are the most common causes of adult disability (Arthritis Foundation, 2016) with fully half of those 65 years or older being diagnosed with osteoarthritis, gout, fibromyalgia, or rheumatoid arthritis (Centers for Disease Control, 2014).

As many as 54 million Americans over age 50 experience either osteoporosis or low bone mass resulting in 2 million fractures annually. Additionally, many sufferers have subsequent long-term nursing home care costs (National Osteoporosis Foundation, 2014). One million suffer from Parkinson's, costing \$25 billion per year in direct and indirect costs (Parkinson's Disease Foundation, 2017)

In a 2011-2012 study, "Nearly all U.S. adults aged 65 and over (96%) with any permanent teeth had dental caries" (Dye, Thornton-Evans, Li, & Iafolla, 2015, p. 2). Furthermore, 19% of adults aged 65 and over are edentulous or have missing teeth, and "edentulism was twice as prevalent among adults aged 75 and over (26%) compared with adults aged 65-74 (13%)" (Dye et al., 2015, p. 4). To compensate for this, many eat soft foods high in refined carbohydrates and low in protein which contributes to a nutritional imbalance.

Compared to Americans 18-44 years of age, those 65-74 were twice as likely to report diminished vision while those over the age of 75 were three times as likely (National Health Interview Survey, as cited in American Foundation for the Blind, 2015). Three-fourths of those over the age of 75 have major olfactory impairment, which frequently leads to taste impairments (Boyce & Shone, 2006).

Consider the lament of Barzillai, an advisor to King David. "*I don't have long to live; why should I go with Your Majesty to Jerusalem? I am already eighty years old, and nothing gives me pleasure any more. I can't taste what I eat and drink, and I can't hear the voices of singers. I would only be a burden to Your Majesty*" (2 Sam 19:34, 35).

As illustrated in Table 1, evidence of this diminishing of quality of life in the senior years is seen in a number of other biblical accounts. These accounts are not exhaustive, but rather an illustrative list. Other less debilitating but equally noticeable changes seen most often in the elderly include insomnia, loss of voice tone and resonance, graying of the hair, sarcopenia, an increase in phobias, and to a large extent a lessening of sexual desires and mutual partner pleasuring. A 2001 review conducted by the British Geriatrics Society reported that although many continue to be sexually active into their 80s and even 90s, the tendency is for sexual activity to decrease with advancing years. Physical challenges related to this include need for a longer arousal time, reduced penile rigidity and vaginal lubrication, drugs and/or diseases leading to impotence, along with other physical changes leading to a decreased interest (Kessel, 2001). A later study funded by the pharmaceutical company, Pfizer, looked at both genders between the ages of 40 and 80, living in 29 countries. Results showed that 17% of males and 24% of females experienced diminished sexual drives as they aged (Nicolosi, Laumann, Glasser, Moreira, Paik, & Gingell, 2004).

Table 1
Biblical Accounts of Diminishing Quality of Life

Person	Malady	Scripture
Haran	Premature death	“Haran died before his father Terah ...” Gen 11:28
Isaac	Failing eyesight	“And it came to pass that when Isaac was old, and his eyes were dim, so that he could not see ...” Gen 27:1
Eli		“Eli was ninety and eight years old; his eyes were dim, that he could not see.” 1 Sam 4:15
Eli	Cardiovascular disease Obesity	“And it came to pass, when he made mention of the ark of God, that he fell from off the seat backward by the side of the gate, and his neck brake, and he died: for he was an old man, and heavy.” 1 Sam 4:18
David	Unregulated body temperature	“Now king David was old and stricken in years, and they covered him with clothes, but he got no heat.” 1 Kgs 1:1
Asa	Perhaps Diabetes or Gout	“Nevertheless in the time of his old age he was diseased in his feet. And Asa slept with his fathers ...” 2 Chron 17:23, 24
David	Failing Strength	“Cast me not off in the time of old age; forsake me not when my strength fails.” Ps 71:9

Longevity: The Biblical Ideal

Despite the grim statistics reported heretofore, the data represent present reality and not potentiality. Long held views that aging is a slow process of disintegration, with the quality of life gradually and painfully diminishing over the last decade, until at last one escapes from both physical and mental anguish, need to be reexamined. This theoretical paper seeks to disrupt the above generally held view of the aging process. As documented below, more and more individuals are reaching the century mark while at the same time experiencing a meaningful existence largely devoid of debilitating afflictions. In fact, such an extended, productive life is actually what the Bible sets up as the ideal (See for example Job 5:26; Ps 92:12-14; Ps 105:37; and 3 John 2).

To the extent that problems of aging can be delayed; the vigor, vim, and vitality of a fulfilled life can be prolonged. It is the extension of those most

productive years which has preoccupied the attention of both clinical medicine and public health education during the last century. In numerous countries, life expectancy is at the highest levels since the time of Moses. Notice this declaration in Ps 90:10, *“The days of our years are threescore years and ten; and if by reason of strength they be fourscore years, yet is their strength labor and sorrow; for it is soon cut off, and we fly away”* (KJV).

As infectious diseases have been brought under control in developed countries, life expectancy at birth has continually risen. Should inroads be made in the lifestyle diseases of cancer, heart disease, and stroke, such expectancies will continue to rise in future years. Table 2 presents the latest statistics for the 10 countries with the highest overall life expectancy.

Table 2

World Health Organization Life Expectancy Data

Rank	Country	Life Expectancy (yrs)	HALE Life Expectancy (yrs)	HALE Rank
1	Japan	83.7	74.9	1
2	Switzerland	83.4	73.1	4
3	Singapore	83.1	73.9	2
4	Australia	82.8	71.9	15
4	Spain	82.8	72.4	9
6	Iceland	82.7	72.7	7
6	Italy	82.7	72.8	5
8	Israel	82.5	72.8	5
9	Sweden	82.4	72.0	12
9	France	82.4	72.6	8
31	United States	79.3	69.1	36
124	Philippines	68.5	61.1	121

Currently, the United States ranks 31st at 79.3 years while the Philippines ranks only 124th with a male/female combined life expectancy of 68.5 years (World Health Organization, 2016). A more accurate determinant of aging, however, may be obtained by focusing on the HALE column. On average, there is a 10-year discrepancy between the two columns. Thus, the writer of Ecclesiastes' picture of increasing frailty appears to be the norm for the majority during the last decade of their lives. While there are many factors impacting this discrepancy, including genetics, environment, socio-economic status, natural and man-made disasters, among others, the focus of this paper is on disrupting or challenging the normal aging paradigm by documenting that a proper lifestyle approach to aging, no matter the degree of external factors, can enable individuals to not only experience a greater quantity, but even more importantly, an enhanced quality of life.

Research has demonstrated that to a large degree, the habits of youth are determinants in the number of years lived. Several decades ago, Belloc and Breslow (1972) published seven health practices: never smoked, exercised regularly, moderation in the use of alcohol, seven to eight hours of sleep per night, maintenance of proper weight, eating breakfast, and not snacking between meals, that were highly correlated with the age of mortality. In a follow-up survey of the original study, men following all seven practices had a mortality rate 72% lower than those following zero to three of these health habits. For women, the rate was not as robust, just 57% lower which was still a highly significant figure (Breslow & Enstrom, 1980).

D.A.M.S. Paradigm

More recently, Dan Buettner, in collaboration with the National Geographic Society, explored the world looking for population groups that had an unexpectedly large number of centenarians. Initial findings pertaining to Okinawa (Japan), Sardinia (Italy), and Loma Linda (California) were published in the November 2005 issue of *National Geographic*. Later, the findings were expanded into the bestselling book, *Blue Zones* (2008).

The researchers concluded that long-lived populations manifested nine characteristics. However, at the core were five overarching components—1) Do not smoke; 2) have a purpose in life as demonstrated through strong family and spiritual orientations; 3) engage in daily physical activity; 4) have strong social networks; and 5) eat largely a plant food diet based on lots of fruits, vegetables, and whole grains. Four of the practices are synthesized to form the acronym D.A.M.S. (Diet, Activity, Mental attitude, and Social, Spiritual connectivity; see Figure 1), the paradigm for this paper.

Why D.A.M.S? Not only does the acronym aptly identify four critical elements of longer life expectancy, but it capitalizes on the purpose of dams in our natural environment. Dams provide stability by controlling water flow downstream thus minimizing an overload (flooding) while at the same time enabling adequate water distribution in lean times (drought). Through the production of hydroelectric power, dams are an instrument for energizing communities. Via the lakes that form upstream, dams play a critical role in recreational pursuits. Last, when dams function properly they promote an improved, safer and more stable environmental landscape. These four elements of stability, increased energy, enhanced leisure or quality of life, and a more protected personal environment are the desired outcomes of a lifestyle based on the D.A.M.S. acronym.

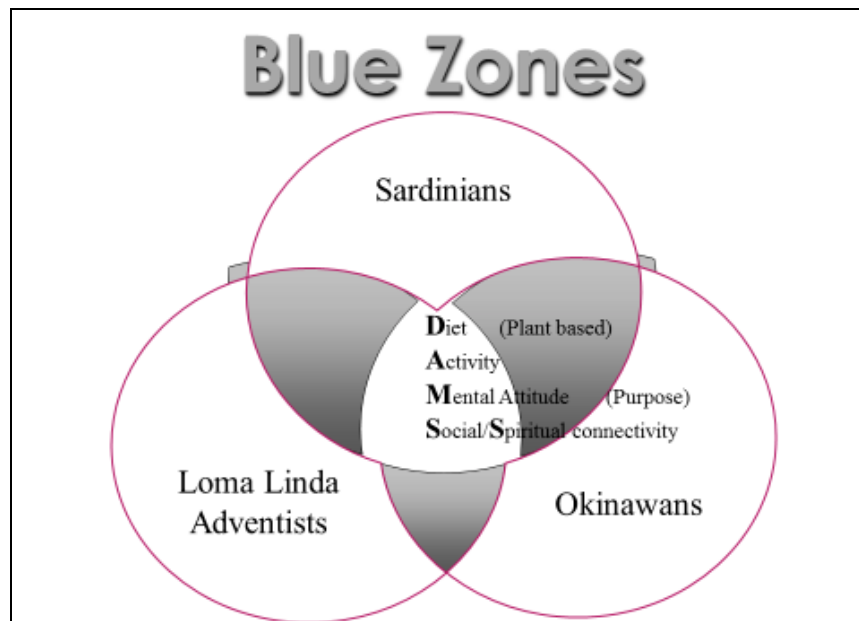


Figure 1. Adapted from *National Geographic*, November 2005

Beginning with the first Adventist Health Study publications in the late 1950s and early 1960s (Lemon, Walden, & Woods, 1964; Wynder, Lemon, & Bross, 1959), Seventh-day Adventists have continued to set the standard for quality of life and longevity. Since those earlier studies, over 400 peer-reviewed scientific papers (Loma Linda University, School of Public Health, 2016) show that Seventh-day Adventists (SDAs) have less lung cancer, less colo-rectal cancer, less prostate cancer, less heart disease, less stroke, less cirrhosis, less bronchitis, less

emphysema, less diabetes, and less ulcers than do their counterparts. The dramatic reductions in these diseases have resulted in 7.4 years of extended life for male SDAs and 4.4 years for females (Loma Linda University, School of Public Health, 2008). This “Adventists Advantage” (Time, 1966) has been duplicated in other countries including Norway (Fonnebo, 1992; Waaler & Hjort, 1981), Denmark (Jensen, 1983; Thygesena, Hvidtc, Hansenc, Hoffb, Rossd, & Johansenb, 2012), Poland (Jedrychowski, Tobiasz-Adamczyk, Olma, & Gradzikiewicz, 1985), and Japan (Hirayama, 1985) to name but a few.

A Square-Edged Existence

It is important to note that health and longevity are not inversely correlated with chronic and debilitating diseases alone. More than 30 years ago, Berkman and Syme (1979) demonstrated that independent of one’s health practices, interpersonal support is also important for longevity and good health. Marriage, contact with close friends and relatives, church membership, and informal group associations were all factors leading to longer life.

In the United States, since 1900, life expectancy at birth has increased by 31.5 years from 47.3 to 78.8 (Arias, Heron, & Xu, 2016), thus illustrating that in developed countries, the fourscore years foretold by David has been reached. Fries (1980) suggested that life expectancy of the human species might not be much more than 85. Shortly thereafter, Morrison (1983) hypothesized that rather than experiencing a gradual decline of physical and mental capacities over the last decade or two of life, it was theoretically possible for mankind to maintain the “joie de vivre” through middle age into the senior years. In this “square-edged paradigm” (See Figure 2) the aged would only minimally experience the chronic debilitations commonly seen in the elderly. Instead of gradually deteriorating to the point where death becomes a welcome escape, life would come to an abrupt end over a few weeks or months rather than years while most faculties were still intact; not unlike what happens when a light bulb blinks out.

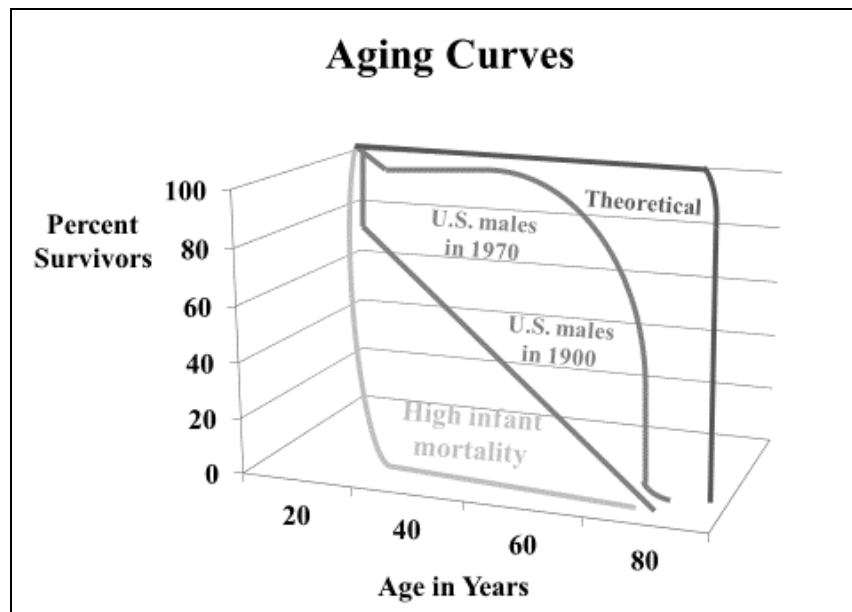


Figure 2. A square-edged existence paradigm

Certainly, there are biblical examples in support of the paradigm in Figure 2.

Job 5:26- *“Thou shalt come to thy grave in a full age...”* (KJV).

Deut 34:7- *“And Moses was an hundred and twenty years when he died: his eye was not dim, nor his natural force abated”* (KJV).

Josh 14:10, 11- *“.... Lo, I am this day fourscore and five years old. As yet I am as strong this day as I was in the day that Moses sent me: as my strength was then, even so is my strength now”* (KJV).

Luke 2:36, 37- *“And there was one Anna, a prophetess... she was of a great age... a widow of about fourscore and four years, which ... served God with fastings and prayers night and day”* (KJV).

The foregoing anecdotal accounts harmonize with the second half of **Job 5:26**, *“... like as a shock of corn cometh in his season.”* Corn comes to an abrupt end (harvested) at the time it is in full maturity. The implication here is that life was intended to have a “square- edged existence,” not a gradual, discomfiting and debilitating, flickering out.

The question then is whether or not this is simply theoretical as stated by Morrison (1983) or indeed in the 21st century, it can be a reality. Over the last

three decades, the percentage increase of Americans becoming centenarians has almost doubled that of the percentage increase in the general population, yet the proportion still falls below that of many other developed countries (Brandon, 2013). Buettner's (2005) salient findings document that increasing numbers continue to live productive lives into their 70s, 80s, and 90s as illustrated by those seniors surpassing the age of 75 who still water ski, garden, engage in difficult yoga poses, and continue to engage in productive work.

While a graduate student, I had the privilege of accompanying 91-year-old Hulda Crooks in setting two climbing records, which 30 years later still remain intact. On July 24, 1987, she became the oldest woman and oldest American to reach the summit of Mount Fuji, Japan's highest peak, at 12,388 feet (3,776 meters). Just six weeks later, she broke her own record as the oldest person to climb Mt. Whitney, the highest mountain in the continental United States, at 14,497 feet (4,420 meters). (Her life story can be found in Andress & Gohde, 1996.)

Equally amazing was Mavis Lindgren, who started running marathons at the age of 70 and averaged five a year into her eighties. VO2 max measurements indicated Hulda had a fitness level equivalent to the average woman 25 years younger while Mavis was even more impressive having a VO2 max equivalent to a female college-aged student (Nieman, 1990, p. 364). The fact that both women were quite sickly through their teens and early adult years, demonstrates that it is never too late to implement the healthy lifestyle changes in the **Diet, Activity, Mental attitude, Social/Spiritual connectivity** model. While there is much research that validates each of the components of D.A.M.S., what follows is a sampling of current studies supporting each element.

Diet

In Gen 1:29 and 3:18, God prescribed the fuel designed for optimal functioning of the human body; a diet consisting of fruits, grains, nuts, seeds, and vegetables. As a group, adherents of the mostly plant-based Adventist diet have the longest life expectancy rates in the United States (Buettner, 2008, p. 124). Their top foods mimic the original diet -- nuts, beans, whole wheat bread, and other grains, soy milk, tomatoes and many different kinds of fruits (Buettner, 2005). Numerous studies and variations of the Gen 1:29 diet have validated that this diet remains the best for promoting health and longevity. Some of the well-known advocates include the Barnard Diet, the China Study Diet, the CHIP Program, the Esselstyn Diet, the Hallelujah Diet, the McDougall Diet, and the Ornish Diet (McDougall, 2012).

Activity

In addition to proscribing a diet, God gave to humans an exercise program by placing them in a garden and then instructing them to “work it and take care of it” (Gen 2:15). After sin entered the planet, human exercise program was intensified, causing mankind to exert themselves at a level that would produce sweat. “You will have to work hard and sweat to make the soil produce anything” (Gen 3:19).

A recent Australian study of 204,542 middle-aged and older adults demonstrated that those who added at least some vigorous activity to their exercise routine had a lower risk of mortality than those who exercised only moderately (Gebel et al., 2015). Notice the specific wording of reporters at *Science 2.0* who summarized these findings: “Physical activity that makes you *puff and sweat* (emphasis my own) is key to avoiding an early death” (News Staff, 2015).

Further support comes from a second article in the same online edition of *JAMA Internal Medicine* that reported Gebel’s work. Arem and colleagues (2015) pooled data from the National Cancer Institute Cohort Consortium. They concluded that individuals who met recommended levels of physical activity—either through moderate or vigorous activity levels—had an overall reduced risk of mortality that was also observed specifically for cardiovascular disease and cancer.

Recent attention has been given to the phenomenon now known as “sitting disease.” The premise is that prolonged periods of daily sitting increase risk of premature mortality and this association is so pervasive that it cannot be counteracted by simply engaging in an hour or two of exercise daily. Rather, regular physical activity must be scattered throughout the day. In America, those over the age of 60 comprise one of the most inactive groups, spending “about 60% of their waking time in sedentary pursuits” (Matthews et al., 2008, p. 875). In an American Cancer Society 14-year follow-up study of 123,000 males and females who responded to a questionnaire on sitting and physical activity, inactive men (sit for more than 6 hours per day) were 48% more likely to die than their counterparts who spent more time standing, while inactive women were 94% more likely to die than those sitting less than half that amount (Patel et al., 2010). Such is the pervasive impact of physical inactivity that globally it is estimated to account for 6% of the burden of disease and that 1.3 million deaths a year could be averted simply by increasing daily physical activity (Lee, Shiroma, Lobelo, Puska, Blair, & Katzmarzyk, 2012). In all these studies, the critical factor is the reduction of sedentary time throughout the day by intermittently incorporating activity, even if it is light to moderate.

Mental Attitude

While chained in a dank Roman prison, the apostle Paul instructed the church in Philippi that they should not be anxious but in everything have a thankful heart as they made their petitions known to God. He then admonished them to think only on those things which would generate positive feelings (Phil 4:6, 8). Canadian researchers concluded that data on 6,000 participants underscored the potential for meaningful purpose to influence healthy aging across adulthood. The results were so profound they concluded that further investigation regarding the association between life purpose and longevity was needed (Hill & Turiano, (2014). During a 14-year follow-up study, they found that those who died during that period had lower self-reported purpose in life than did those who survived. What came as a surprise to the investigators was the consistency of purpose in life over the lifespan, whether it be in the younger years, middle-age, or senior citizens, to predict lower mortality rates.

One interesting way in which seniors can improve their mental attitude is by engaging in daily bouts of therapeutic laughter. In a pilot study of 70 seniors (43 experimental; 27 control), 60 years and older, those who engaged in weekly therapeutic laughter classes significantly reduced their negative thought patterns and lessened their feelings of depression (Andress & Matsumoto, 2015).

Social/Spiritual Connectivity

Christians are admonished to meet together on a regular basis for the purpose of encouraging one another (Heb 10:23-25). The importance of strong social ties in the promotion of health has been validated through an exhaustive study by researchers at Brigham Young University and the University of North Carolina at Chapel Hill in which they pooled data from 148 studies on health outcomes and social relationships (Holt-Lunstad, Smith, & Layton, 2010). Odds of dying during the study's follow-up period were 50% higher for subjects with poor social connections than for those having more robust social ties. The authors concluded that the magnitude of this effect is comparable to quitting smoking and it is larger than that seen in many other well-known lifestyle factors, specifically lack of exercise and obesity. In fact, they began their review with this quote from an earlier study, "Social relationships, or the relative lack thereof, constitute a major risk factor for health—rivaling the effect of well-established health risk factors such as cigarette smoking, blood pressure, blood lipids, obesity and physical activity" (House, Landis, & Umberson, 1988, p. 541).

Fraser and colleagues (1997) suggested that a certain amount of the favorable Adventist mortality data may be due to their increased levels of social support. Perhaps the best known and most widely published authority in the area of spirituality and health is Harold Koenig of Duke University Medical Center.

Among his many publications is a 2012 review of 600 scholarly articles pertaining to the connectivity between spirituality and health. He concluded that 93% of 45 studies showed the importance of spiritual dimensions in providing meaning for living. Other findings demonstrated that reduced depression, better diet, greater physical exercise, less debilitating disease, and stronger social support were all strongly correlated with a life based on strong spiritual values (Koenig, 2012). Of particular significance is the following, “The most impressive research on the relationship between religion/spirituality and physical health is in the area of mortality,” with the “increased survival of 37% highly significant and equivalent to the effect of cholesterol lowering drugs” (Koenig, 2012, p. 11, 12).

Conclusion and Recommendations

Since their beginnings in 1863, Seventh-day Adventists have seen their mission and calling to be one of restoring in mankind the image of God, not just spiritually but mentally and physically as well. It is unfortunate that except for a handful of studies, most research on the lifestyle of Seventh-day Adventists has been limited to North America. It is time for the Adventist International Institute of Advanced Studies (AIAS) to take a leadership role in ascertaining whether or not North American Adventist Health Study results are generalizable to the Philippines and Asia. The Public Health Department in the Graduate School in collaboration with the newly opened College of Medicine at its nearby sister institution, the Adventist University of the Philippines, would appear to be well-qualified to carry out such research. Further collaboration could be provided by investigators at Loma Linda University’s School of Public Health and experts in the Health and Exercise Science Department at its sister institution, La Sierra University.

If such research were to validate an Adventist Advantage, the impact on the Philippines could be significant in the promotion of a healthier diet, the incorporation of more physical activity, and validation of positive mental attitudes along with the importance of strong social ties through religious communities; all necessary factors to move the Philippines towards a longer life expectancy with improved quality of life throughout the lifespan. If previous Adventist Health Study results are not duplicated, it would provide a much-needed impetus for a more aggressive approach to teaching Filipino laity the importance of adopting a healthier lifestyle.

Whether or not, the above recommendation becomes reality, AIAS has the potential to become the premier role model for the Philippines by making strides among its administrators, faculty, staff, and students in implementing and inculcating the best strategies salient in the D.A.M.S. model. Especially, it is well-positioned to practice and promote the spiritual connectivity dimension of the

paradigm which Koenig (2012) concluded should be integrated into all medical patient care as a part of the mainstream approach to healing.

For the Christian, this added dimension translates into more than just an extension of life expectancy, or a higher quality of life experienced throughout the senior years. There is the added expectation of a never-ending pain-free existence. This is truly the most disruptive aging paradigm imaginable. “And God shall wipe away all tears from their eyes: and there shall be no more death, neither sorrow, nor crying, neither shall there be any more pain: for the former things are passed away” (Rev 21:4, KJV). Thus, it is only as eternal values are put in true perspective that life extension on this earth becomes meaningful. Unless there is hope beyond the grave, the waning golden years, no matter how good their quality, will echo the concluding utterances of King Solomon on the futility of human endeavor “*Vanity of vanities, ... all is vanity*” (Eccl 12:8).

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*William C. Andress, DrPh
Associate Professor, La Sierra University
Riverside, California, USA
wandress@lasierra.edu*