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ABSTRACT

TRAINING VOLUNTEER AND NON-PROFESSIONAL
HEALTH EDUCATORS IN THE CONTEXT OF THE
MILWAUKEE SEVENTH-DAY ADVENTIST
COMMUNITY

by

Glenn Cassimy

Adviser: Stanley Patterson

ABSTRACT OF GRADUATE STUDENT RESEARCH

Project Document

Andrews University

Seventh-day Adventist Theological Seminary

Title: TRAINING VOLUNTEER AND NON-PROFESSIONAL HEALTH EDUCATORS IN THE CONTEXT OF THE MILWAUKEE SEVENTH-DAY ADVENTIST COMMUNITY

Name of researcher: Glenn Cassimy

Name and degree of faculty adviser: Stanley E. Patterson, PhD

Date completed: June 2017

Problem

The Sharon SDA Church is a prominent faith based organization (FBO) in the Milwaukee district. Like many other churches in the community, the Sharon SDA Church continually seeks to adopt innovative strategies to assist in improving the health status of their congregants. Although the Sharon SDA Church and various faith-based organizations implement health program initiatives as a part of their mission, at the end of any program effort, there is still the need for ongoing member support to assist congregants in fully achieving the goals they set during their health initiative. This study,

therefore, is an attempt to provide the Sharon SDA Church with the human resources needed to meet that challenge.

The primary aim of this initiative, conducted with the support of the leaders of the Sharon SDA Church, was to train 18 lay health workers to serve the congregants as lay health workers. A secondary goal of the training program was to measure the effect of the training in improving the health habits of participants. Participants' training included (a) the merits of a vegan diet, (b) the intake of fruits, vegetables, nuts and grains, (c) the benefits of rest and exercise, (d) the negative effects of processed foods, and (e) the merits of drinking an adequate amount of water on a daily basis.

Methodology

The training method implemented was a single-case research design, initiated by a pre-survey and culminated with a post survey (these surveys provided descriptive statistics but no formal research methodology was applied which is normal for Doctor of Ministry projects. There are elements of qualitative research applied but was not supervised by a methodologist therefore should not be interpreted to be formal qualitative research). A small group of 18 members was selected for training as lay health workers to serve their church body. Training strategies included the use of videos, peer tutoring, small group discussions, lectures, and question/answer sessions.

The pre-surveys and post-surveys were administered to measure the success of the training program in initiating positive lifestyle changes in trainee behavior relative to exercise, sleep/rest, water intake, meat consumption, use of plant foods, and avoidance of processed foods. Data from 11 trainees was used to measure the effect of the training program. The post-survey additionally measured trainee perception about the possible

factors negating positive lifestyle changes in congregants at the end of a program initiative. Trainee conclusions of factors nullifying congregants' adoption of positive lifestyle changes will prove useful in the designing and implementation of future health initiatives.

Results

Exercise: Initial survey data revealed that two out of 11 trainees perceived that exercise was "somewhat important" for maintaining good health. Final data results showed that 10 of the 11 trainees felt that exercise was "very important."

Sleep: Initial surveys revealed that all trainees believed sleep was "important" or "very important" to maintaining good health. Summative survey data showed no change in participants' perception.

Water: Initial data revealed that participants placed the intake of water into three categories: "somewhat important," "important" or "very important." Final survey results indicated a shift in perception. Two participants stated that an adequate intake of water is "important" and nine considered it to be "very important."

Plant Foods: Initial and post survey data were constant relative to the importance of plant foods and good health. Trainees believed that plant foods were 'very important' for maintain good health.

Meat consumption: Trainees' initial perception was that the consumption of meat products would have a "significant" or "very significant" negative impact on human health. Post-survey data, however, revealed that one trainee believed that meat products would not have a "significant" negative impact on human health.

Conclusions

The results indicate that the recruiting/selection, methodology, and curriculum utilized for the training produced positive results. The success of the program was also due to the ongoing support of the pastor and church leaders. Future training studies should cater for the inclusion of a larger percentage of young trainees. Research project's topics may include the development of a lay health worker training manual, effectiveness of lay health worker training programs, and developing and implementing youth-sponsored and directed community health worker training initiatives.

Andrews University

Seventh-day Adventist Theological Seminary

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HEALTH EDUCATORS IN THE CONTEXT OF THE
MILWAUKEE SEVENTH-DAY ADVENTIST
COMMUNITY

A Project Document

Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Ministry

by

Glenn Cassimy

June 2017

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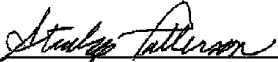
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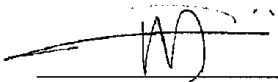
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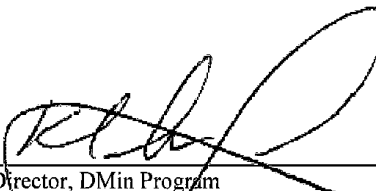
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Stanley E. Patterson



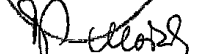
Richard Sylvester



Moses Taiwo



Director, DMin Program
Kleber D. Gonçalves



Dean, Seventh-day Adventist Theological
Seminary
Jifri Moskala

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Date approved

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Adviser,
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Richard Sylvester

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Moses Taiwo

Date approved

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CHAPTER 1

INTRODUCTION

Personal Background Related to the Project

Health education has traditionally been a major area of focus for Seventh-day Adventist and it continues to be emphasized as significantly important today. As a second generation Seventh-day Adventist, my desire has been to determine how Adventist church members can most effectively benefit from their health reform teachings.

After I experienced several years of failed attempts to understand and apply the basic principles of health reform, Dr. Hans Diehl's *Coronary Health Improvement Program* (CHIP) provided me with a basic understanding about how the human body benefits from rest, exercise, adequate water intake, and the consumption of plant foods. This understanding of health reform was just a springboard to my ongoing research on the importance of diet and exercise in the development of healthy human bodies. My personal research in this field continued for several years and included presentations to local church communities and small groups about the importance of eating a healthy diet, and avoiding the dangers of low-density lipoprotein (LDL) cholesterol and heart disease.

This research project is the culmination of my effort to systematically study the research previously conducted in this field, and to present the findings from a theological perspective.

Description of the Ministry Context

The Sharon Seventh-day Adventist Church is located in Milwaukee, Wisconsin. Approximately 150 members, of predominantly African-American descent, worship there every Sabbath. Officers and members are very active promoting and conducting the work of their respective departments, from the Sabbath School department in the morning to the youth department in the late evening. There is a church school that serves both the church and community by providing a Christian education for about 50 students from pre-kindergarten through grade 8. Departmental leaders take great pride in their service to church and community and the presence of visitors at church on a weekly basis signifies that the church promotes a strong outreach program.

The population of Milwaukee is approximately 599,642. About 8.9% of this population is 65 years or older, and 27.1% of the population is 18 years or younger. Caucasians represent 44.8% of the population and African Americans 40%.

The median household income for Milwaukee is \$35,467 and 29.1% of the population lives below the poverty level. High school graduation rate is 81.25% and 22.1% of the city's population holds a bachelor's degree or higher.

In 2015, the church utilized a full Sabbath day for community outreach. The outdoor program was conducted on the church grounds. Various community organizations participated in this event, which attracted visitors from the local community.

Statement of the Problem

The Sharon Seventh-day Adventist Church elects a Health and Temperance leader for a term not exceeding two years. The elected leader is not required to have a

background or any training in health education or on the principles of maintaining good health. The Sharon Seventh-day Adventist Church does not provide formal training for Health and Temperance leaders during the year. There is ongoing discussion among church members about whether the Health and Temperance Department is effective in promoting positive lifestyle changes for its constituents.

Statement of the Task

The task of this project was to develop, implement, and evaluate a curriculum for training 18 members of the Sharon Seventh-day Adventist Church with a basic education on the principles of obtaining and preserving good health. At the beginning and end of the training program, the trainees completed a survey. The data from this survey was assessed to determine the effectiveness of the training program in creating positive lifestyles changes among participants.

Methodology

The training method implemented was a single-case research design, initiated by a pre-survey and culminated with a post survey (these surveys provided descriptive statistics but no formal research methodology was applied which is normal for Doctor of Ministry projects. There are elements of qualitative research applied but was not supervised by a methodologist therefore should not be interpreted to be formal qualitative research). A small group of 18 members was selected for training as lay health workers to serve their church body. The selection process was conducted in two phases with input from church leaders. Training strategies included the use of videos, peer tutoring, small group discussions, lectures, and question/answer sessions.

The pre-surveys and post-surveys were administered to measure the success of the training program in initiating positive lifestyle changes in trainee behavior relative to exercise, sleep/rest, water intake, meat consumption, use of plant foods, and avoidance of processed foods. Data from 11 trainees was used to measure the effect of the training program. The post-survey additionally measured trainee perception about the possible factors negating positive lifestyle changes in congregants at the end of a program initiative. Trainee conclusions of factors nullifying congregants' adoption of positive lifestyle changes will prove useful in the designing and implementation of future health initiatives.

Limitations

Eighteen trainees participated in the program. The training and the information obtained provided research data about a limited number of participants. Consequently, the information obtained cannot be used to generalize for a large population. Further research will be needed.

The study was also limited to a small Seventh-day Adventist sample group in the Midwest. Participants were African American. Further study should include a cross section of participants of various religious groups, ethnicities, and socio-economic status. Five of the members selected had no prior training or professional education in a health-related field. The remaining six had a background in a health-related field.

Delimitations

The study did not address the impact of the training or lifestyle changes made by trainees over an extended period. It was not a longitudinal study. In addition, it did not

address how trainees will use their acquired knowledge to educate others in their local churches or in their extended communities over time.

This study gave no consideration to the various moderators of health. In selecting trainees, no consideration was given to their smoking, exercise, rest, or dietary habits. Trainees were not asked whether they had previously had medical problems or were currently receiving medical attention for an existing ailment. Lastly, there was no consideration for the age factor.

Description of the Project Process

Theological reflection focused on the creation of mankind and the food God gave them at creation. Study was given to the Levitical account that outlines the steps Israel must take in reconnecting with God, and the importance of purity in that process. Attention was given to clean and unclean meats, animal sacrifices, and defilement. New Testament studies focused on the human body as the temple of God.

Study was given to current literature as it relates to diet and exercise. This literature was examined to determine how community health workers had been trained, and the effect of that training on the target population. In addition, an examination was made to determine whether the training and curriculum used were primarily designed to address a cure for the diseases, or whether the training and curriculum included a preventative health care component, such as the adoption of a plant food diet.

Definition of Terms

Adventist: A member of any of the Christian groups, such as the Seventh-day Adventist that holds that the second coming of Christ is imminent (*Collins English dictionary*, 2014).

Christian Leadership: Christian leadership is a dynamic relational process in which people, under the influence of the Holy Spirit, partner to achieve a common goal - it is serving others by leading and leading others by serving (Christian Leadership Center, n.d.).

Mediterranean Diet: The Mediterranean Diet is a way of eating based on the traditional foods (and drinks) of the countries surrounding the Mediterranean Sea (Oldways, n.d.).

Community Health Workers (CWCs): Community health workers are lay members of communities who work either for pay or as volunteers in association with the local health care system in both urban and rural environments and usually share ethnicity, language, socioeconomic status and life experiences with the community members they serve. (Community Health Worker National Workforce Study (2007, March).

Lay Health Worker (LHW): A lay health worker is a member of the community who has received some training to promote health or to carry out some healthcare services, but is not a healthcare professional (Lewin et al., 2010).

Lay Health Advisors (LHAs): Lay health advisors are “community residents who have been trained to deliver health information” (Paskett et al, 2006).

CHIP: The Complete Health Improvement Program (CHIP) - formerly Coronary Health Improvement Project - is an affordable, lifestyle enrichment program designed to

reduce disease risk factors through the adoption of better health habits and appropriate lifestyle modifications (“The Complete Health Improvement Program,” n.d.).

LDL Cholesterol: a lipoprotein of blood plasma that is composed of a moderate proportion of protein with little triglyceride and a high proportion of cholesterol and that is associated with increased probability of developing atherosclerosis (*Merriam-Webster dictionary*, n.d.).

CHAPTER 2

TOWARD A THEOLOGY OF HEALTHFUL LIVING AND FAITH IN GOD

Introduction

The author of Genesis gives us a view of the creation of mankind on the sixth day: “And the Lord God formed man out of the dust of the ground, and breathe into his nostrils the breath of life and man became a living soul” (Gen 2: 7). After He formed the man from dust, God breathed (Hebrew: *nep* meaning- to blow, to gasp, or pant) into Adam’s nostrils the breath of life (Hebrew *hay* meaning life or maintenance) and he became a living soul (*nephesh* meaning life, people, soul, or personality). There is no reference here to any other element of Adam’s existence. The biblical record of creation states that God created Adam’s body and subsequently added breath. From the Scriptures, we also understand that we should keep our body healthy and undefiled because it is the dwelling place for His Spirit. Paul writes, “What? Know ye not that your body is the temple of the Holy Ghost” (1 Cor 6:19-20)? The word ‘temple’ as translated in this verse means “dwelling place.” It seems logical that anyone who desires to continually renew his/her spiritual life should also emphasis the development of the physical body, because according to Paul, this is where God’s Spirit dwells. Care for the physical body should include maintaining a healthy lifestyle.

There is biblical reference about the close relationship that should exist between the spiritual and physical wellbeing of mankind. Paul writes, “for ye are bought with a price: therefore, glorify God in your body, and in your spirit, which are God’s” (1 Cor 6:20).

In an assessment of the religious and spiritual beliefs and quality of life of a sample of fifth year medical students, Al-Naaimi and Younis (2010) state, “These religious and spiritual beliefs contributed to a good response to quality of life as it was similar to another comparable sample in the nearby stable country of Jordan” (p. 415). In this study, the data indicated that there was a relationship between spirituality and quality of life. This relationship will be discussed later in this discourse. It seems evident, however, that any emphasis on renewing the spiritual component of mankind will have as a coexisting goal of the renewal and development of the physical body.

God as Designer in Genesis

The first chapter of Genesis gives us a record of the first six days of creation. The author is very clear that God is the Architect and Creator of the earth. He spoke the various elements into existence and named each one. He assigned functions to the firmament, light, and darkness. He created the animals, water, grass and dry land. On the sixth day, He created the man and the woman and assigned them the responsibility to manage the earth and all living things.

In the creation story, the author stated that God saw that the light was good and He divided light from darkness (Gen 1:4). In the declaration that the light was good, we can conclude that this light was designed according to specifications, and that it was fully capable to complete the task of giving light to the world. Catling and Zahnle (2009) add

another function of light: “All bodies in the solar system are heated by sunlight” (p. 36). Trenberth and Stepaniak (2004) inform us that the atmosphere (created on the second day Gen 1:5) and the oceans (created on the third day Gen 1:10) work in conjunction with sunlight to heat the earth (p. 2678). Seely (1991) states that conservative scholars have interpreted the Hebrew word *raqiac* translated “firmament” in Genesis 1:6, as an “atmospheric expanse” (p. 227). In reference to this atmosphere, Trenberth and Stepaniak (2004) note,

The atmosphere does not have very much heat capacity but is very important as the most volatile component of the climate system in moving heat and energy around, with wind speeds in the jet stream often exceeding 50 m s^{-1} . The oceans have enormous heat capacity and, being fluid, also can move heat and energy around in important ways. Ocean currents may be $>1 \text{ ms}^{-1}$ in strong currents like the Gulf Stream, but are more typically a few cm s^{-1} at the surface. (p. 2678)

Genesis 1: 3-5 sets the stage for our understanding of God’s role in every aspect of the life of mankind.

The creation order and design reveal that God was providing all elements and utilities the man and woman needed for the comfort of life. On the second day, He created the firmament. On the third day land, sea, grass, herb yielding seed and fruit were created. He made a light for the day (sun) and another for the night (moon) on the fourth day. The fowls of the air, and animal life at sea came on the fifth day. And finally, animal life on the earth was created on the sixth day. When Adam finally came out of the hand of God, we may conclude that he had all that was needed to live a happy and productive life (Gen 1: 1-28)

In the process of creating man on the sixth day, the account says that God formed Adam out of the dust of the ground (Gen 2:7). By this single act of creation, we know that God retains the blue print for the human body. He alone knows and understands

every detail about the human body. Because He created, it seems evident that He is the single authority on how the human body can be maintained in good health.

Man's Provisions

The creation of mankind is recorded in Genesis 1. The food prescribed for his diet is included along with the creation story. This diet included fruits from trees, and grain from the fields. There is no reference there to provisions from any other source:

And God said, Behold, I have given you every herb bearing seed, which is upon the face of all the earth, and every tree, in the which is the fruit of a tree yielding seed; to you it shall be for meat. (Gen 1:29)

The record of Genesis 1 identifies the creation process and outlines how the living creatures would be sustained.

Provision for the sustenance of the newly-appointed monarch and his subjects is next made... Of the three classes into which the vegetable creation was divided, grass, herbs, and trees (ver. 12), the last two were assigned to man for food. (Spence-Jones, Exell, & Deems, 1950, p. 31)

After the fall of Adam and Eve, God outlined to them the consequences of their sin. There was the curse on the serpent, painful childbearing upon Eve, and a curse upon the ground for Adam's sin (Gen 3: 14-19). The "herb of the field" was then added to Adam's diet (Gen 3: 18). The addition of the "herbs of the field" is recorded in conjunction with the curse of the ground. We can conclude that herbs would provide additional nutrients to the man who was now required to till the ground for food (Gen 3: 17-19). By this act, God shows us that He is our Creator and knows the needs of our bodies.

The ninth chapter of Genesis chronicles the introduction of flesh to the diet of mankind. In this record of meat as food, and in the prior introduction of "the herb of the field" to Adam's diet, we should observe possible causal factors. In both instances of the

diet modifications, we may note and conclude there was a dramatic event that precipitated or necessitated that change. In the first instance, sin was the catalyst—herbs were added to his diet (Gen 3:18), and in the second instance there was the destruction of all vegetation by the flood—flesh was then added to man’s (Gen 9:3).

The Creator who designed the human body provided the perfect source of nourishment to keep both Adam and Eve healthy at creation. The foods assigned to them in Eden still exist today. The ground produces vegetation and foods for human growth and good health. Trees bearing fruit exist in abundance around the world, and nuts and grains are readily available for consumption. Herbs also, added to mankind’s diet after sin, can be found in abundance for utilization.

God also provided a source of food for the animals. There is no observable record that they were created to eat one another: “And to every beast of the earth, and to every fowl of the air, and to everything that creepeth upon the earth, wherein there is life, I have given every green herb for meat: and it was so” (Gen 1:30).

God’s declaration that everything created was very good informs mankind that the work of the supernatural God needs no improvement. The food He assigned to Adam at creation was perfect for his use. Attempts to alter it may not be beneficial to mankind today.

Levitical Account

In the account in Leviticus relative to God’s relationship with His people, it should be noted that according to Bible chronology, more than 2000 years had elapsed since creation. Moses had freed Israel from Egyptian bondage and God was now redirecting His chosen people to live a sanctified life. God introduced the sacrificial

system and outlined the dietary laws to Israel. Meat had become a part of their diet since the flood (Gen 9:3-4). Through Moses, God outlined the dietary laws to Israel with the command for His people to adhere to them and be holy (Lev 11).

The Sacred and Holy

After the laws of the various offerings and the consecration of the priests in Leviticus 1-9, chapter 10 introduces a narrative about the killing of Aaron's two sons—Nadab and Abihu. This chapter is clear about God's regard for what is holy, and chapter 11 brings us to the conclusion as stated, that God required Israel to be a holy nation.

The Bible contains various passages and instructions about holiness in relation to Israel. Leviticus 10 speaks directly to this topic and shows the extent to which God abhors human disregard for things that are sacred. In the story of Nadab and Abihu we see God's insistence that we distinguish between the holy and unholy.

While performing their first priestly function in the sanctuary, Nadab and Abihu placed "strange fire" (common fire) in their censers and not the fire from the brazen altar as they were instructed to do (Lev 9:24; 16:12, Rev 8:5). God demonstrated that He shows deference between fire that is sacred and holy and the fire that man kindles. Nadab and Abihu were immediately slain when they disobeyed God's direct command.

Interestingly, Krass (1994) sees a connection between the dietary laws of chapter 11 and the death of Aaron's two sons of the preceding chapter. Krass' emphasis here is about God's regard for holiness:

The context in which the dietary laws of Leviticus are given demonstrates that their concern is, indeed, with purity and holiness. The immediate antecedent is the problematic sacrifice of Nadab and Abihu, who 'offered strange fire before the Lord, which He had not commanded them. (p. 45)

Sprinkle (2000) seems to agree with Krass that the death of Nadab and Abihu is tied directly to the significance to the dietary laws which follow in chapter 11: “God explains that through this incident ‘I will show myself holy among those who are near me, and before all the people I will be glorified’” (p. 652).

Sprinkle goes further and illuminates the relationship between clean and unclean and God’s holiness:

In reference to the death of the two sons of Aaron, God warns against coming into the ‘most holy place’ (Lev 16:1-2). This bracketing of the laws of clean and unclean with the death of Aaron's two sons and the idea of the sanctuary's holiness suggests that the most important lesson conveyed by this system is that God is holy (i.e. “set apart”). (p. 652)

Krass goes beyond the death incident and states: “God's first speech after this episode of the strange fire gives something of a dietary law to Aaron and the priests--no wine or strong drink before entering the sanctuary” (p. 45).

A closer look at the chapter provides us with insights on Wolak (2013) thinking (by use of the word “sobriety”) relative to what he believes contributed to the death of Aaron’s sons:

And the Lord spake unto Aaron saying, Do not drink wine nor strong drink, thou, nor thy sons with thee, when ye go into the tabernacle of the congregation, lest ye die: it shall be a statute forever throughout your generations: And that ye may put difference between holy and unholy, and between unclean and clean; And that ye may teach the children of Israel all the statutes which the Lord hath spoken unto them by the hand of Moses. (Lev 10:8-11)

In reference to verse 8 above, Wolak identifies intoxication as a factor that had possibly clouded the priests’ ability to differentiate between the sacred and the unholy and might have contributed to their death:

Note also that the prohibition was communicated by God directly to Aaron, not through Moses, implying that it served as an explanation to Aaron for the death of his sons. The need for sobriety is self-evident – priests are community leaders doing holy

work. They must therefore retain a clear mind in order to perform their duties thoughtfully. If Nadab and Abihu had somehow been intoxicated, they would not have kept a clear head and might thus have committed an infraction that aroused God's anger. (p. 223)

Watts (2008) views the demise of Aaron's sons from a different perspective. He sees it as the subject matter of noncompliance. Firstly, he draws attention to various sections in Chapters 8 through 10 where God required compliance to instructions and procedures (Chapter 8:4, 5, 9, 13, 17, 21, 29, 31, 34, 35, & 36; Chapter 9:5, 6, 7, 10, & 21. Chapter 10: 5, 7, 11, 13, 15, & 18). These passages refer to directives from God and often contain the words "as the Lord commanded":

This chain of refrains reporting compliance with divine instructions is broken in 10, 1 by an act described specifically in the language of non-compliance (Nadab and Abihu did "what had not been commanded"), only to have compliance reestablished through the rest of the chapter. The automatic cost of non-compliance illustrated by 10,1-2 shows not only that the priests must comply (the usual moral drawn), but also implies that their continued survival shows that they usually do comply. The fact that their work, if done incorrectly, places them in mortal danger only emphasizes the priests' dedication. The rarity of such divine outbreaks implicitly attests to the priests' competence. (p. 313)

Goswell (2007) sees it as a "misuse of holy things" and draws reference to another Bible incident that elicited a similar fate:

The deaths of Nadab and Abihu (Lev 9:1–11:47) and the death of Uzzah (2 Sam. 6:1–7:17) are punishments for the misuse of holy things...In the Torah and the Prophetic passages the deaths of the offenders serve as a sober lesson that things must be done exactly as prescribed by God. Uzzah was stuck down because he touched the ark, something that only priests were allowed to do, for it is they who had charge of the furnishings of the tabernacle, the ark included (Num. 3:8; 4:1-20); and there is a reminder in the same context of the fate of Nadab and Abihu (Num. 3:4). (p. 93)

In reference to Nadab and Abihu, Meyer (2013) has reservations about the view that their death was attributed totally to the fact that they offered "strange fire," or that something was wrong with the fire (p. 2). In regard to bringing incense he states that

The sons of Aaron were unauthorised to do this, since it was Aaron's prerogative as high priest to bring incense, as is clearly stated in Exodus 30:1–9. The 250 lay

persons are killed in Numbers 16, because they are also not authorised to bring incense. The text furthermore establishes a bridge between Exodus 30:8–9 and Leviticus 16:12–13, where it is said that the fire must come from the altar. Thus the *second* problem is that the fire came from somewhere else. (p. 2)

The remainder of Leviticus 10 focuses on Aaron's understanding about how God responds to man's disregard to the command to be holy and to respect things that are holy. Aaron shows his understanding by his refusal to eat the flesh of the sin offering (Lev 10: 16-20). In eating the flesh of the sin offering the priest symbolically transferred the sin of the people to himself (Lev 10:17). In this incident, Aaron and his two remaining sons did not fulfill the specific command of God to eat the flesh of the sin offering. We can speculate that they saw themselves as totally sinful and incapable of bearing the sins of Israel because of their culpability in the sin of Nadab and Abihu.

When Moses rebuked Aaron for not fulfilling his duty, Aaron's response was "and if I had eaten the sin offering today, should it have been accepted in the sight of the Lord?" (Lev 10:19 NIB). As the high priest, Aaron accepted responsibility for the sins of his sons, Nadab and Abihu. He questioned whether he and his two sons would be permitted to eat the sin offering in the holy place on the same day that his older sons were struck down for violating God's command. Aaron understood that disobedience to God is a sin that declares man to be unholy. Holiness and purity were important in the priestly ministry and in God's relationship with His people.

This narrative gives credence to a belief that in order for mankind to care for the things that matter in life: body (physical), spirit (spiritual), and mind (intellectual), men and women should constantly retain a high level of sobriety that will allow them to make positive decisions in daily living.

Clean and Unclean

In the creation of the world story of Genesis chapter 1, and in the laws of Leviticus 11 where God continues to established a nation, we find the three themes: blessings (Gen 1:28, Lev 11:45), sanctification (Gen 2:3, Lev 11:44), and diet (Gen 1:29, Lev 11: 1-30). While the blessings of Leviticus 11 seem to be related to Israel's selection as a chosen people and their imminent inheritance of a specific territory: Canaan, the blessings of the creation story are more likely related to the gift of the land or entire world that was turned over to Adam. Sanctification in Genesis 2:3, refers directly to hallowing the seventh day (global implications), while sanctification in Leviticus 11 is directed to Israel, a single nation: "Ye shall therefore sanctify yourselves" (v. 44). The third theme, which is the focus of this study, is diet. Ironically, the diet of Genesis 1: 29 pivots around the creation of the earth, blessings, then a pronouncement that everything was very good, while diet of Genesis 3:18, Genesis, 9: 3-4 and Leviticus 11; 1-30 centers around the curse of the ground, and the destruction of the world. This construct of antithesis as outlined, is embedded in the dietary laws of clean and unclean of Leviticus 11: a stark reminder of good and evil.

The reference to "holy and unholy" and "clean and unclean" of Leviticus 10:10, presents a fitting springboard to the theme of clean and unclean of the post-flood diet as outlined in chapter 11. In this chapter, God commanded Israel to refrain from eating unclean foods. From among the beasts, God instructed His people not to eat various animals including the camel, coney, hare, and swine. His first reason for this command was that they were "unclean unto you" (Lev 11:4). Another reason is given later in this chapter.

Among the fish, God instructed His people not to eat those that do not have fins and scales. The designation given for the foods addressed in this prohibition was that “they shall be an abomination unto you” (Lev 11:10).

Among the fowls of the air, God also declared that they should not eat the eagle, ossifrage, ospry, vulture, kite, raven, and others. The reason stated was that they are an abomination. God also instructed Israel, “all small animals that scurry along the ground are detestable, and you must never eat them” (Lev 11:41 NLT).

Fawyer and Overstreet (1990) cite the medical reasons why some land animals may have been excluded from the diet outlined in Leviticus 11:

Animals excluded from these provisions in Leviticus 11 include rats, lizards, skunks, snakes, and weasels, which are predators and carriers of parasites. Pigs were excluded understandably, as it is now known that pigs carry parasitic trichina larvae. (p. 273)

They give us additional insights about the biological reasons for the inclusion or elimination of various sea creatures from Israel’s prescribed diet:

Edible seafood was limited to fish with scales and fins (Lev 11:9-12). This is because fish with fins could swim against currents and tides, avoiding polluted, infected areas of water. Scales also protect fish from pollution and infection. The Israelite diet was abundant with fish, and fish oils are thought to reduce cholesterol and triglyceride blood levels, thereby diminishing atherosclerosis.

The dietary carbohydrates of the Israelite diet included several fruits from the vine, figs (rich in oil and vitamin A and C), honey (predigested by bees), and whole grain breads. Barley provided an excellent source of fiber. (Fawyer & Overstreet, pp. 273, 274)

This research conducted by Fawyer and Overstreet (1990) points out that Adam’s original provisions are beneficial today, and that physicians’ recommendation of a diet high in fiber would certainly include fruits and vegetables which are low in fat (p. 274). Current research by Dalen and Devries (2014) support Fawyer and Overstreet’s earlier

findings where that study focused on reducing the prevalence of coronary heart disease (CHD):

The primary end point, a combination of stroke, myocardial infarction, and cardiovascular deaths, was reduced by 30% in the group randomized to a Mediterranean diet supplemented with extra virgin olive oil and 28% lower in the Mediterranean diet with mixed nuts compared with controls. Analysis of the primary end point revealed that most of the observed benefit was accounted for by a reduction in strokes. (p. 337)

While the focus in Dalen and Devries' study was the adoption of the Mediterranean diet, current research also focuses on the benefits of the vegetarian diet. This diet also seems to obtain similar results. Fraser (2009) in his research states:

Much remains to be understood. However, it seems clear that vegetarians experience less CHD than do others. Their risk factor status would lead us to expect this result. The evidence that risk of diabetes is less in vegetarians is highly suggestive, although as yet it comes from cross-sectional work and mainly from California vegetarians. Again, what is known of causal factors in diabetes would lead us to expect this result. Body weight is lower in vegetarians and much lower in California Adventists. LDL cholesterol is lower in vegetarians, and this is probably true for blood pressure and risk of treated hypertension. The reasons for the blood pressure association are not well understood, and more research may refine our understanding of this. (p. 1610)

The Mediterranean and vegetarian diets are geared to improve physical health.

Although the preservation of health is not directly identified as a reason for the dietary laws of Leviticus, we may still conclude that God desired that Israel should be in good health. The attention in Leviticus, however, seems to be on holiness.

God declared that His people should not make themselves abominable or unclean with any creeping thing because they would be defiled by eating them (Lev 11:43).

Leviticus 11:44 is pivotal to our understanding of God's injunctions. Here He calls the Israelites to sanctify themselves and to stay clear of the defilement that will result from eating unclean meats. He declared that because He is the Lord their God, they should sanctify themselves (Lev 11:44). And finally, God gave Israel the reason why they must

refrain from eating unclean meats: because He is a holy God, they also must be holy (Lev 11:45).

This theme of God's holiness and His subsequent demand for Israel to be holy (Lev 11:45) is extant to the New Testament writings. Peter's call on New Testament believers to a life of separation and holiness (1 Pet 2:9) is similar to God's call to ancient Israel to be separate and holy. Peter identifies four qualities of New Testament believers that to some extent mirror God's expectation of Israel when Moses delivered the dietary laws of Leviticus 11. Believers are identified as a chosen race, a royal priesthood, a holy nation, and God's own people (1 Pet 2:9 RSV). The reason stated here for God's selection of the believers is "that you may declare the wonderful deeds of him that called you out of darkness into his marvelous light" (1 Pet 2:9). Isaiah states a similar function assigned to Israel as God's chosen people: "I will also give thee for a light to the Gentiles, that thou mayest be my salvation unto the end of the earth" (Isa 49:6).

The biblical record of Leviticus 11 (as outlined by God's injunction for Israel to refrain from eating unclean animals) and his purpose for selecting ancient Israel and believers today can be tied directly to the spiritual relationship God desires to establish with His followers. Holiness as a unique quality is central to God's relationship with ancient and modern Israel, but in addition to that construct, God desires that His people must attain the state of purity. The laws of purity follow the dietary laws of Leviticus 11.

Purity

A review of Leviticus 11: 44-47 and Leviticus 15 may be used to define purity as the state of sanctification synonymous with holiness that includes adherence to the laws of "clean and unclean" and freedom from "defilement" in all its forms. After the

circumcision of a male child, the purification ritual of the mother required that “she continue in the blood of her purifying” *ta-hora(h)*, meaning cleanness, cleansing or purifying (Lev 12:4). In current research, purity is often described by identifying its inverse state—impurity. Haber (2008) reviews David Z. Hoffmann’s construct of impurity which is broken into two parts: a bodily defilement that stands in opposition to purity, and a defilement that stands in opposition to holiness (pp. 10, 11). The subsets of the former are contact with dead bodies, body fluids and discharges, and contact with ritual objects. The latter includes eating forbidden foods, acts of idolatry, and violation of sexual prohibitions (p. 11).

Goldstein (2015) gives credit to the work of Jonathan Klawans who states that there are two types of impurity: “ritual impurity” and “moral impurity” (p. 3). Ritual impurities are described as those that society tolerates and recognizes as fulfilling a specific function. Examples include the birth of a baby or burying the dead. In his view, moral impurity should be avoided and is “considered intentionally sinful” (p. 3). His examples of moral impurity included all forms of sexual prohibitions, murder, and apostasy. Haber (2008) notes that Hoffmann’s “bodily defilement that stands in opposition to purity” is the equivalent of Goldstein’s “ritual impurity” and also his “defilement that stands in opposition to holiness” construct parallels Goldstein’s “moral impurity.”

Examples of the purification ritual of Leviticus need attention. The woman who had an “issue and her issue in her flesh be blood” (Lev 15:19), was required to take two turtles or two young pigeons to the priest for a sin offering and a burnt offering. The purification or cleansing for the person who is cured of leprosy or a severe skin disease

involved two separate rituals (Lev 14). On the first day of the ritual cleansing, two birds and other implements are used to begin the cleansing process (Lev 14:4). After eight days two male lambs and one ewe lamb were used to complete his cleansing. The reason given for the need for this purification was that their impurity should not defile the temple where God dwelt (Lev 15:31).

Sprinkle (2000) reviews the purification injunction from a different angle. He postulates:

The purity system arguably conveys in a symbolic way that Yahweh is the God of life (order) and is separated from that which has to do with death (disorder). Corpses and carcasses rendered a person unclean because they obviously have to do with death. (pp. 469, 470)

Redemption, Separation, and the Land

God said to the Israelites that they should not make themselves “abominable” with any creeping thing that creepeth” and neither should they make themselves “unclean with them” (Lev 11:43). The first reason for this command is directly stated: “For I am the Lord your God: ye shall therefore sanctify yourselves and ye shall be holy” (Lev 11:44). The second reason is related to deliverance and separation: “For I am the Lord that brought you up out of the land of Egypt to be your God, ye shall therefore be holy, for I am holy” (Lev 11:45). The injunction to Israel was that they must be holy because God had brought them out of Egypt to be their God. By the act of taking Israel out of Egypt, prescribing a diet different from that of the nations around them, and making them a unique monotheistic nation, God had separated them from all nations. Sprinkle (2000) adds understanding to the theme of Israel’s separation, to include a separation by class, nation, and space:

Priests were "holy" and separated from other Israelites for service in the sanctuary, ordinary Israelites are "clean" and separated from non-Israelites, leaving non-Israelites as "unclean" (and some, such as Canaanites, with especially wicked idolatrous practices are an abomination: Lev. 18:26-30; Deut. 7:1-5, 25-26; 20:17-18). There is a similar system of separation of space: the tabernacle (associated with priests) is holy, the land (associated with the Israelites) is clean, and the rest of the world (associated with Gentiles) is unclean. Thus the purity system symbolically reinforced teaching elsewhere that Israel was a "holy nation" (Exod 19:6) set apart from all others. (p. 651)

Israel's separation of space was already evident by the fact they were in the wilderness and out of Egypt. Instructions from God focused on their worship, health, work, cleanliness, sacrifices, and interpersonal relationships. The task committed to Israel was distinct from the nations. It was now up to Israel to obey His statutes and receive their reward.

In addition to the redemption that they were experiencing in the wilderness, they looked forward to the final reward of inheriting the land that God had promised them. Their obedience to God's regulations was not to be considered as an action of the future or dependent on time of entry into the Promised Land. It was to be an act of the present because God had redeemed them from Egypt and was preparing them to enter the land of promise:

Ye shall therefore keep all my statutes, and all my judgments, and do them: that the land, whither I bring you to dwell therein, spue you not out. And ye shall not walk in the manner of the nations, which I cast out before you: for they committed all those things, and therefore I abhorred them. But I have said unto you, Ye shall inherit their land, and I will give it unto you to possess it, a land that floweth with milk and honey: I am the Lord your God, which have separated you from other people. (Lev 20:22-26)

The redemption theme, therefore, when taken holistically, was possibly a constant reminder to Israel to perfect holiness, healthful living, and the worship of one God. Additionally, they would experience the separation, and sanctification that God designed for His nation.

Healthy Bodies

In his salutation to Gaius, John mentions two important things that the believers should possess. The first is the physical means to sustain themselves comfortably, and the second is good health: “Beloved, I wish above all things that thou mayest prosper and be in health, even as thy soul prospereth” (3 John 2). In this salutation, there is also a nexus between prosperity and good physical health on one hand, and that of spiritual prosperity on the other. Spiritual prosperity is referenced in the words: “even as thy soul prospereth.” The passage, therefore, places prosperity and good health in conjunction with spiritual growth, which comes from God.

Both the Old and New Testaments contain various councils on health. These Bible passages address the importance of rest (Exod 20: 9, 10), temperance (Tit 1:8), eating at regular intervals (Eccl 10:17), maintaining a happy disposition at mealtime (Eccl 3:10), refraining from eating strangled animals (Acts 15:20), and abstaining from the consumption of blood (Acts 15:20). A close analysis of these passages provides ample evidence that God is interested in mankind’s health and that He provided instructions for them to follow.

Temperance and Striving for Mastery

When Paul addressed the importance of temperance, he noted that a person who is preparing to run a race will exercise moderation in all aspects of his life: “And every man that striveth for the mastery is temperate in all things. Now they do it to obtain a corruptible crown; but we are incorruptible” (1 Cor 9:25).

Paul’s thoughts are clearly stated about moderation in daily living; however, attention must also be placed on the words ‘striveth for the mastery’ in this text. The

Christian who desires to follow God's instruction must work diligently to accomplish this goal. Paul concludes that just as the runner strives for mastery, so must the one who desires to please God in eating and drinking, also strive to overcome the temptation to return to his previous eating habits.

In reference to eating, Jesus warns, "And take heed to yourselves, lest at any time your hearts become overcharged with surfeiting and drunkenness" (Luke 21:34). Two harmful practices addressed in this verse are "surfeiting" and "drunkenness." Current research provides insights on the harmful effects of overeating. Gobal, Deshmukh, Shah, and Mehta (2011) state, "It is being recognized that some lifestyle patterns such as overeating result in metabolic syndrome, which may play a role in the development of chronic kidney disease and coronary heart disease" (p. 2303). Additionally, drunkenness may cause harmful reactions on various parts of the human body. Renna (2008) notes, "Alcohol abuse and alcohol dependence (or alcoholism) impose a big burden on society. These two syndromes are associated with a number of medical morbidities, including cirrhosis and fetal anomalies" (p. 92). Jesus' injunction is relevant today just as it was applicable when spoken centuries ago.

Spirituality and Health Related Factors

There is some interest today in scholarly research about the relationship between spirituality, wellness, and positive health practices. Some studies indicate that spirituality or religious practices positively affect the physical wellbeing of individuals. In their research, Gill, Minton, and Myers (2010) find "Spirituality and religiosity did account for a statistically significant proportion of the variance in their wellness, and differences in spirituality, religiosity, and wellness by race/ethnicity were not found" (p. 301).

A more recent study by Johnstone et al. (2012) includes other factors as predictors of health and wellbeing but the researchers concluded that “spiritual beliefs, experiences, and coping strategies are important in impacting one’s health, regardless of how they are conceptualized, and should continue to be used in clinical practice and investigated in health research” (p. 22).

Another study by Yeary, Ounpraseuth, Moore, Bursacand, and Green (2012) examines the effect of social capital on health outcomes. This study views members in communities of faith as potential health and wellbeing benefactors:

Active involvement in a faith community may increase social capital, leading to better health. Scholars have speculated that something inherent in being actively involved in a faith community may be responsible for the relationship between religion and health, particularly the association between religious attendance and health (Brown et al. 2003; Oman and Reed 1998; Oman et al. 1999). Given that social capital includes the resources available to individuals through their involvement in groups - such as faith communities - and the social features of those groups or communities, social capital may be a powerful mediator in the religion-health connection. (p. 335)

Summary

God created Adam and Eve in Eden and prescribed their food that included nuts, fruits, and grains. After Adam sinned, God added herbs to his diet. Meat was introduced as a meal component following the flood. Meats that are clean and unclean were outlined to Moses and passed on to Israel (Lev 11). Israel was admonished to refrain from eating unclean animals because they were an abomination to God who desired a holy nation because He is holy. In addition, God demanded purity from His people because He is pure.

The Bible contains various references to health. We are encouraged to abstain from drunkenness and overeating; and to guard against the effect of alcohol. The

Scriptures also admonish us to abstaining from blood and animals that are strangled.

Then, in the New Testament, there is Paul's counsel is to be temperate in all things (Tit 1:8).

The divine plan is the restoration of the people of God into the image of God.

There are times when the diet of the people of God will be what is available to them.

That, however, should be the exception rather than the rule.

Current scholarly research gives support to the health principles outlined in the Bible, relative to the process we should follow to maintaining good physical health.

Research shows that in addition to adhering to guideline on dieting, attention must be given to exercise.

CHAPTER 3

LITERATURE REVIEW

Introduction

In this literature review, we will address the rationale for including health education as a part of Christian leadership and ministry. In addition, we will review various studies conducted in the development of lay health workers, but we will give special attention to projects that summarize and integrate the work contained in some of those studies. Lewin et al. (2006) note that the term “lay health worker” generally refers to individuals who “perform diverse functions related to health care delivery...they have no formal professional or paraprofessional tertiary education, and can be involved in either paid or voluntary care” (p. 5). It should be noted initially, that research on the training of lay health workers is generally subdivided into training related to specific diseases such as diabetes, cancer, hypertension, and cardiovascular disease, and that training programs generally include two subsections: selection or recruitment and curriculum.

Since the specific training in our project is diet and health related, our primary goals are (a) to identify the training methodologies and processes used for training lay health workers as identified in the research literature, (b) to use selections in those findings as a guide in mapping the training for our study, and to add to the literature using

a specific reporting research-based framework. Our unique project trainees will be identified as lay health workers because of their role in assisting church members in making lifestyle changes in diet and health.

The general research literature includes various names for lay health workers. The term Community Health Worker (CHW) is widely used to describe these workers, and that title has been adopted in medical circles and institutions. The Community Health Worker National Workforce Study (2007), conducted by the US Department of Health and Human Services Health Resources and Human Administration states:

Community health workers are lay members of communities who work either for pay or as volunteers in association with the local health care system in both urban and rural environments and usually share ethnicity, language, socioeconomic status and life experiences with the community members they serve. They have been identified by many titles such as community health advisors, lay health advocates, “*promotores(as)*,”¹ outreach educators, community health representatives, peer health promoters, and peer health educators. CHWs offer interpretation and translation services, provide culturally appropriate health education and information, assist people in receiving the care they need, give informal counseling and guidance on health behaviors, advocate for individual and community health needs, and provide some direct services such as first aid and blood pressure screening. (pp. iii, iv)

In this study, we will examine past and current protocols in training lay health workers (LHWs). From an examination of the literature, we will try to determine what research has been completed in training lay health workers, and we will use that information as a springboard for designing training methodologies and procedures for working with lay health workers serving as interventionists in diet and health. In order to effectively design and implement a LHW training program, study must be given to two significant components of that initiative: selection of trainees and curriculum design.

Currently we will:

1. Establish the leadership rationale for this project

2. Establish the validity of a health-related project in the context of a professional degree in Christian ministry
 - a. Contribution of Ellen White to the Health Ministry of the Seventh-day Adventist Church
3. Review research studies related to training community health workers
4. Give credit and reference to the prior work conducted by O'Brien et al. (2009), in their evaluation of 46 community health worker research studies
5. Give credit and reference to the prior work conducted by Cherrington et al. in their evaluation of 16 CHW programs
6. Identify differences between those two programs
7. Support O'Brien's proposal for a standardized procedure when reporting training findings in CHW research initiatives
8. Examine O'Brien's model for reporting training data
9. Study the work of interventionists in the care of diabetes and cancer patients.

The Leader's Commitment to Improve Those Being Led

One of the primary responsibilities of a leader is to improve those being led. Jesus led by example. He said to His disciples: "A new commandment I give unto you, that ye love one another; as I have loved you, that ye also love one another" (John 13:34). Apart from the account that John chronicles about Jesus' method of leading by example, Luke gives us an insight about how He equipped His disciples for their assigned tasks: "Then he called his twelve disciples together, and gave them power and authority over all devils, and to cure diseases. And he sent them to preach the kingdom of God, and to heal the

sick” (Luke 9:1-2). We may conclude from the accounts of John and Luke that Jesus desired to achieved a transformation in the disciples’ love relationship for one another (John 13:34), and that He also desired they should be fully equipped to achieve their assigned tasks. According to the example of Jesus, effective leadership demands that those being led experience a transformation exemplified by the life and methodologies utilized by the leader and that they also receive the skills needed to accomplish their assigned tasks.

Greenleaf (1977) agrees that effective leaders desire that those being led must experience a transformation. He states that this transformation can be easily verified by the leader’s attention to the following question: “Do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants?” (pp. 13, 14). Leaders who experience this transformation are more likely to become effective leaders.

Guiste and Guiste (2015) recognize the leader’s commitment to improve his followers. They outline three reasons why effective leaders teach with the goal to improve others: “Credible leaders teach for three fundamental reasons: (1) to transmit their own ideas, values, beliefs, and direction to their followers; (2) for the multiplication of leadership in their organization; and (3) for the empowerment of their followers” (p. 138). A comparison of Jesus’ methods and the Guistes’ view is worth mentioning. Guiste and Guiste’s view that leaders teach to transmit their ideas, values, and beliefs is evident in the admonition of Jesus to His disciples that: “ye love one another; as I have loved you, that ye also love one another” (John 13:34). Secondly, the argument that credible leaders teach to increase the number of leaders in their organization is typical of Jesus’

method. After sending out the twelve disciples, He later sent seventy-two (Luke 10:1). Lastly, Guiste and Guiste claim that credible leaders teach to empower their followers. Jesus empowered his disciples by His teachings and also “gave them power and authority over all devils, and to cure diseases. And he sent them to preach the kingdom of God, and to heal the sick” (Luke 9:1-2).

In summary, effective Christian leadership demands that church leaders lead by example and that those being led are transformed in the process. It is imperative that church leaders empower their followers to adopt positive life-style changes and also that they provide the framework and opportunities for effective change.

Health as a Christian Leadership Mandate

There are various Old Testament and New Testament Scripture references about the importance of maintaining good health. Solomon admonishes his readers about maintaining a positive and joyful disposition and warns us about the danger of worrying along with the consequence of a stressful life: “A cheerful heart does good like medicine, but a broken spirit makes one sick” (Prov 17:22, TLB). In his writings to the church at Rome Paul states, “I plead with you to give your bodies to God because of all he has done for you. Let them be a living and holy sacrifice – the kind he will find acceptable (Rom 12:1-2 NLT). The question for present consideration is whether this modeling by Paul and even Old Testament writers relative to providing spiritual guidance on health issues is needed today.

In order to answer that question, we need to look no further than the current health condition in the US and the world today. Despite our increased knowledge on health

issues and modern advances in medicine and science, human diseases and health issues continue to plague modern society. Anshel (2010) states:

Mounting annual health care costs in the US and other countries attest to the ubiquitous practice of unhealthy behavior patterns. One sad outcome of this dilemma is the deteriorating condition of our health, nationwide, with particular concern about increasingly poor health among youth. (p. 33)

Bopp, Baruth, Peterson, and Webb (2013) believe that the unique influence of the clergy provides the mandate for ministers to assume a leadership role in the health of their laity:

Faith-based organizations reach a large portion of the population within the United States and remain an influential community institution. The clergy members who lead these organizations have significant influence on the daily functioning, programs, policies, and social or cultural environment within these organizations, creating suitable, and perhaps ideal, situations for helping clergy “lead their flock” to health. (p. 189)

Anshel (2010) goes further in outlining the clergy’s role: “The religious leader's role is to provide the client with faith-based incentives to initiate and maintain changes in their health behaviors, and perhaps to provide resources for the individual to pursue an action plan” (p. 32). Anshel’s position is based on his view that in order to attain success in changing community health, the clergy is positioned to be the most logical and effective change agent. He further states, “No one in the community has more credibility and power to change behavior than a person's religious leader” (p. 33).

From the writings of both Old Testament and New Testament Scripture coupled with current research relative to the power or influence of clergy in influencing health-related behaviors among the parishioners, we may safely conclude that teaching health care remains a mandate for church leaders. White (1867) proposed a similar function for ministers: “It is important that instructions should be given by ministers in regard to

living temperately. They should show the relation which eating, working, resting, and dressing, sustain to health” (p. 618).

Contribution by Ellen White to the Health Ministry of the Seventh-day Adventist Church

Ellen White has written extensively about health reform. Her writings were directed to the new believers of the fledging Adventist church primarily in the 19th century. Although she died in 1915, her writings continue to influence discussions and decisions relative to health reform practices in the Seventh-day Adventist Church. Her writings on health reform include books such as *Counsels on Health*, *Medical Ministry*, *Counsels on Diet and Foods*, *Temperance*, and *The Ministry of Healing*.

In reference to the diet that God prescribed, White (1938) noted,

God gave our first parents the food He designed that the race should eat. It was contrary to God’s plan to have the life of any creature taken. There was to be no death in Eden. The fruit of the trees in the garden, was the food man's wants required. God gave man no permission to eat animal food until after the flood (p.373).

In addition to White’s counsels to the early Adventist believers on the diet prescribed in Eden, White (1873) also warned the believers about unhealthy eating practices that were common during her time. She stated,

Children are allowed to eat flesh meats, spices, butter, cheese, pork, rich pastry, and condiments generally. They are also allowed to eat irregularly and between meals of unhealthful food. These things do their work of deranging the stomach, exciting the nerves to unnatural action, and enfeebling the intellect. Parents do not realize that they are sowing the seed which will bring forth disease and death. (p. 136)

White (1909) believed that the Adventist believers would have to continue to grow in their knowledge of healthful living. She added,

The time will come when we may have to discard some of the articles of diet we now use, such as milk and cream and eggs; but it is not necessary to bring upon ourselves perplexity by premature and extreme restrictions. Wait until the circumstances demand it, and the Lord prepares the way for it. (p. 162)

Diabetes-related Interventions

In their study of the implementation of the CHW model within the diabetes community, Cherrington et al. (2008) assessed 16 programs across the US. In six of these programs, CHWs were required to be diabetics, and in most programs, they were recruited informally (p. 824). In a broad review of all programs, Cherrington et al. state that:

CHW roles and responsibilities varied across programs; educator was the most commonly identified role. Training also varied in terms of both content and intensity. All programs gave CHWs remuneration for their work. Common challenges included difficulties with CHW retention, intervention fidelity and issues related to sustainability. Cultural and gender issues also emerged. (p. 824)

A summary of their recruitment methods, training topics, and training methods are outlined below.

Program managers used 10 criteria for recruiting trainees. The most common criterion used by programs was the expression by the trainee of a strong commitment to the community (p. 829). Also, the methodologies utilized most often in recruiting trainees were personal community contact, and personal contact in a clinic (Table 1).

Table 1

Recruitment Data: Implementing the CHW Model)

Recruitment Methods	Hours	Percent Category
Interpersonal contact/community	8	50
Interpersonal contact/clinic	5	31
Trained existing paraprofessionals	4	25
Clinic ads	3	19
Media ads	3	19

N =16 Source: Cherrington et al., 2008.

The Cherrington et al. study of 16 programs provided data that showed that there was no heterogeneity in the training curricula. There were six main training topics identified. The single topic identified in the instruction curricula for all programs was diabetes and self-management instruction. Among the 16 programs studied, seven offered training in a health-related technical skill such as monitoring blood pressure. Only four offered instructions in interpersonal skills such as communications and conflict resolution (Table 2). The training categories now added are based on the research conducted by O'Brien et al. (2009), and the three broad training topics identified and recommended for evaluating future CHW projects. Those training categories are relevant health knowledge (RHK), skills-based knowledge (SBK), and research implementation knowledge (RIK) (p. 5).

Table 2

Training Data: Implementing the CHW Model

Training Topics	Number	Percent	Category
Diabetes information & self-management	16	100	RHK
Behavioral change skills	08	050	SBK
Technical health skills	07	044	SBK
Research and administrative	06	038	SBK
Resources and referrals	05	031	SBK
Interpersonal skills	04	025	SBK
N =16			

Source: Cherrington et al., 2008

Training duration varied significantly ranging from eight hours and additional time spent in field work, to 240 hours of training. Training methods generally included role-playing, hands-on exercises, and interactive discussions. A significant training style was a practice teaching activity conducted as role play (Table 3).

Table 3

Training Methodology Data: Implementing the CHW Model

Training Methods	Hours	Percent
Hands on Exercises	10	63
Didactic lecture	07	44
Practice teaching/role playing	06	38
Interactive discussion	06	38
Informal one-on-one	02	13

N =16

Source: Cherrington et al., 2008

The Han, Kim, and Kim (2007) study evaluated the training of Korean of community health workers for chronic disease management. The training was advertised in an ethnic newspaper. Program managers conducted telephone interviews and finally selected 12 Korean trainees:

Participants were mostly female (male = 3, female =9) and middle aged (mean = 50.4 years, range = 43–65 years) and had at least a college level of education (except for one who had a high school education). None of them had a formal health education background. Informed consent was obtained from each participant before the study. (p. 515)

Program managers conducted 48 hours of training which we have organized into the two general categories, relevant health knowledge (RHK), and skills based knowledge (SBK) (Table 4), according to the O'Brien et al. (2009).

Table 4

Evaluation of the CHW Training

Training Topics	Duration	Category
Introduction to hypertension/management		RHK
Stroke prevention		RHK
Introduction to diabetes/management	48	RHK
Hypoglycemia		RHK
Managing glucose levels	Hours	SBK
Foot screening		SBK
Stress and stress management	of	SBK
Community resources		SBK
Who are CHW	training	SBK
Social networks/opportunities		SBK
Client intake		SBK
Medications for diabetes control		SBK
Strategies for community education programs		SBK
Evaluating non-traditional treatments		RIK
Training in program evaluation		RIK
Other		
Healthy eating		RHK
Exercise		RHK

Source: Han et al. 2007

Han et al. (2007) did not provide detailed information about the recruiting process. It was stated that program organizers advertised the training in an ethnic newspaper and that 11 of the 12 trainees selected had a college degree (Table 5). The recruitment lasted two weeks and was performed basically through interviews.

Table 5

Summary of Recruitment & Requirements

Recruitment Methods	Trainee requirements
Ethnic newspaper	Satisfactory communication skills
Telephone calls	College degree
Emails	

Source: Han et al., 2007

Trainees were mostly middle age participants, and none of them had previously had health education training (p. 515). In reference to training methods used, Han et al. (2007) state:

The final version of the curriculum included a facilitator manual; teaching tools, such as slides incorporating information specific to Korean immigrants (e.g. health statistics about Korean Americans) and Korean food pictures; Korean language handouts; role-play scenarios using characters from Korean soap operas and ethnic food recipes. (p. 514)

Look, Baumhofer, Ng-Osorio, Furubayashi, and Kimata (2008) conducted a study on the training of CHWs serving Native Hawaiian and Pacific People. This study revealed the prevalence of Type 2 diabetes among Pacific Islanders. Health agencies in Hawaii conducted a needs assessment and from their findings determined that training CHWs was a top priority (p. 834). Our focus in that study, is about the selection of trainees for their program, and the education they received to function effectively as CHWs. Table 6 identifies their training topics.

Table 6

Diabetes 101-Training of CHWs

	Training Topics	Category
Module 1	Prevalence	RHK
	Types	RHK
	Symptoms	RHK
	Risk Factors	RHK
	Complications of diabetes	RHK
Module 2	Prevention of Type 2 diabetes	SBK
	Monitoring	SBK
	Treatment	SBK
	Information resources	SBK
Module 3	Overcoming barriers to change	RIK
	Stages of change	RIK
	Patient education strategies	RIK
Other	Exercise	RHK
	Diet	RHK

Source: Look et al., 2008, p. 387.

Program directors included a variety of techniques and strategies in the teaching process.

Strategies included:

1. Small class size
2. Multidisciplinary instructors
3. Community-based instructors
4. Rotation of instructors
5. Group learning exercises
6. Case Studies
7. Skits
8. Role models
9. Role-playing exercises.

Recruiting was conducted within health organizations. Program managers invited health agencies to send staff members and volunteers to the training. Attendees were generally CHWs from federally funded community health centers. Most of the trainees were female, and their experience as CHWs ranged from new hires to hires with more than 10 years of experience (p. 837).

From an analysis of the three studies referenced above, all provided relevant health knowledge training that included valuable information about the disease. In the Cherrington et al. (2009) study, CHWs received 46 hours of training. Program managers devoted 16 hours of the training program to the teaching of information about the diabetes (RHK). In their study of diabetes training for CHWs serving native Hawaiian and Pacific people, Look et al. noted that the first training module was dedicated to instruction about information about the disease. The remaining two modules focused on skills based knowledge (SBK), and research implementation knowledge (RIK). It should be noted, however, that in the Han et al. (2007) research, a comparative portion of the training period was also devoted to information about hypertension and diabetes management (RHK), and a portion of that time was earmarked for instruction about the

importance of healthy eating and exercise in maintaining good health. It must be pointed out also, that Look et al. (2008) included the prevention of Type 2 diabetes as a part of Module 2. It is assumed here, that a prevention of Type 2 diabetes study would include attention to diet. The point of emphasis is that in two of the three studies mentioned, CHWs received training in diet, health, and disease prevention.

Recruitment techniques were similar throughout these studies. Program managers relied on advertising in the media, personal referencing, and retraining existing CHWs.

In the process of conducting a CHW training program, consideration must be given to the effectiveness of the reviewed research studies. For our present project, the Cherrington et al (2009) project was the most effective in providing data analysis and community health worker program content.

Cancer-related Intervention

Paskett et al. (2006) conducted a study of an intervention designed to promote and encourage women in a tri-racial community, to use breast-screening processes as a procedure for breast cancer survival. While the goal of that project was to study whether the intervention based on behavior theories would improve mammography attendance, our purpose is to observe and record the lay health worker (LHW) selection and training process, and record the successes gained by program managers. Paskett et al. identified their goals as follows:

1. To outline the benefits of screening
2. To identify the barriers to obtaining mammography screenings
3. To provide knowledge about breast abnormalities.

Program managers selected three lay health advisors (LHAs) from within the district.

These were health professionals who had prior training as LHAs. The selection of their

LHAs for training is stated as follows:

Two Native American and one African American women who lived in the community were hired as the LHAs. These women—a former nurse, a social worker, and a research study interviewer—were selected because they had good social skills; were organized, professional, and courteous; and could work flexible hours. (p. 1228)

We can conclude that the selection process was appropriate for this study since the objective of the project was not the selection of LHA trainees, but primarily an intervention attempt, designed to improve mammography utilization in a rural population. All information relevant to our project will be extracted from this research including the selection and training utilized in the development of the LHAs.

Paskett notes that the training period lasted one week. Training included all three skills categories. Most of the training was devoted to skills based knowledge. Research implementation knowledge received the least amount of time and the training was devoted to a review of protocols and procedures (Table 7).

The training sessions were followed up with periodic reviews and supervisory onsite visits with the LHAs. Onsite visits were designed to continually upgrade the training LHAs had previously received, and to monitor the implementation of the program through an observation of LHA practices. Supervisors were able to support LHAs work and make recommendations for ongoing improvements.

Table 7

Intervention to Improve Mammography Utilization

Training Topics	Category
General project information	SBK
Breast cancer	RHK
Breast abnormalities	RHK
Breast cancer screening	SBK
Breast cancer diagnosis	SBK
Breast cancer treatment	SBK
Risk factors	SBK
Review of protocols and procedures	RIK

Source: Paskett et al., 2006.

Program managers utilized at least nine methods for teaching and instruction. Four of these methodologies may be described as practical training as opposed to the didactic method of instruction. These hands-on methodologies included onsite visit supervision, practice of an intervention session, practice teaching, and breast examination performance (Table 8).

Table 8

Intervention to Improve Mammography Utilization

Training Methods
Supervisor and LHA onsite visits/supervision
Review of LHA resource manual
Practice of an intervention session/role playing
Practice teaching/role playing
Discussion: how to handle problems
Comprehensive written examination
Breast examination performance
In-person meeting LHA supervisor
Review of assigned cases and problems encountered

Source: Paskett et al., 2006.

The strength of this program was the onsite visits and periodic reviews LHAs received. The goals of the program (to identify benefits of screening, identify barriers to screening, and provide knowledge of breast abnormalities) were also addressed in the training curriculum as outlined above (Table 7). This instructional approach of onsite visits and continuing education appears appropriate for the intended goals.

Another study conducted by Johnson et al. (2004) adds to the data relative to ethnicity and the training of CWHs in specific communities. Despite the advancement in breast cancer research and treatment, African American women in the deep south continue to have a higher death rate than their white female counterparts. In an attempt provide answers that will bridge the gap in the death rate between black and white women, Johnson et al. (2004) conducted a study using a large number of community health advisors as research participants (CHARP). Johnson et al. state,

Despite years of advances in the treatments for cancer, especially breast and cervical, African American women continue to have poorer health outcomes than White women, especially in the Deep South. In 1998, for example, the breast cancer death rate for African American women was 35.7 compared to 27.3 for White women. (p. 41)

African American women continued to have poorer health in spite of the use of traditional intervention programs and initiatives to improve their health outcomes. (p. 42). The CHARP project was an attempt to use large numbers of CHAs in a participatory role in research. Program managers proposed that as participants in research, their input would be valuable.

Program managers used community leaders and staff to recruit over 1000 trainees from predominantly African American communities during a period of 28 months (p. 43). The objectives of the program managers were to:

1. promote cancer awareness
2. enhance participation of African Americans in cancer trials
3. recruit and train African American investigators
4. develop and test innovative, community based cancer control measures to effectively reduce the mortality gap between African Americans and Whites (p. 43).

In reference to the training of the workers, Johnson et al. state,

The CHARP training sessions lasted 8 weeks, and each session lasted two hours. The training was divided into two components: cancer education and awareness and core or community leadership skill building. The theoretical framework for the training included: coalition development, Freire’s community empowerment building work, and the community health advisor network model.¹⁹ The training provided study-specific information on breast and cervical cancer and maintenance training. After completing the training, each CHARP group had a graduation ceremony. For participating in meetings and activities, the CHARPs received incentives that included gift certificates, pins, banners, message pens, shirts, and jackets. (p. 43)

The four main curriculum areas identified as the training curriculum are categorized under skills based knowledge (SBK), and relevant health knowledge (RHK) (Table 9).

Table 9

CHA as Partners in Research

Training Topics	Category
Cancer Education and awareness	SBK
Breast and cervical cancer	RHK
Community leadership skills building	SBK
Maintenance training	SBK

Source: Johnson et al., 2004.

Information gained from this study is that the training sessions included specific information on breast and cervical cancer and that 108 individuals participated in the training. The mean average age of trainees was 55 years (pp. 43, 44). The end of the training session included a period for talking circles (TC), where trained CHWs were allowed to discuss questions about the training. Program managers were able to use the

feedback to improve future training sessions. Talking circles (TC) questions and topics were:

1. Discuss your overall thoughts or feelings about your CHARP training.
2. Do you feel that you are adequately prepared to go out into the community to do programs and talks? Why or why not?
3. Do you feel that you have a clear idea of what is expected of you as a CHARP?
4. Do you feel that the expectations are reasonable or unreasonable? Why?
5. What do you like most about the training sessions?
6. What do you like least about the training sessions?
7. What are your thoughts about the materials that you have received?
8. Are there things that you would change about the materials?
9. What about your involvement in developing materials; how early would you like to be involved in that process?
10. Do you have any suggested changes for the training program?
11. Are there ways that we can improve the way the training sessions are conducted?
12. What types of activities have you been involved in so far?
13. What have your experiences been like with those activities?
14. What things have you liked about what you have been doing?
15. Lastly, what do you feel that you need from us on a continuous basis to continue to do your work well? (p. 44)

A lesson learned from this study was that using LHAs as participants in research proved profitable for this project:

The data suggested that the CHARPs could translate complex information and were empowered to do so. Most were able carry out their roles and responsibilities as research partners. A select number, perhaps several hundred or so, were able to go beyond those roles and responsibilities. These CHARPs referred community members to clinical trials and other services and escorted people to health providers. (p. 48)

Trainers used the talking circles (TC) questions listed above to glean additional information about improving their training methodology. The community-based participatory research (CBPR) method to scientific investigations, identified in the Johnson research as the CHARP program, established a partnership between the researchers and the trainees. They were both vested in the findings of the study. Johnson notes, “the results indicated that participants found the project rewarding and beneficial to them as well as their communities” (p. 49).

Another significant study was conducted by Thompson et al. (2009) on post-treatment breast cancer surveillance of African American breast cancer survivors. The ultimate goal was to provide African American breast cancer survivors with information needed to continue ongoing surveillance and care. The researchers state, “studies report racial differences in post-treatment mammography adherence such that African American breast cancer survivors have a lower likelihood of completing consecutive surveillance mammograms over time” (p. 267). Thompson et al. (2009) provide a detailed outline of the selection and training of their LHWs for this project. Two types of LHWs were selected for this initiative. The first was the survivor speaker. This individual was a cancer survivor who was able to speak eloquently and motivate individuals to use faith as a main source of inspiration. Faith would provide meaning for life, and also help the in contending daily with the disease (p. 268). The second type of LHW was referred to as the lay health educator. The educator’s role was to educate the public about the disease (p. 270).

In recruiting LHWs, program managers initially relied heavily on the New York City based Witness Project of Harlem (WPH) (Thompson et al., 2009, p. 270). Letters

were sent to volunteer members and presentations were made at their meetings. In addition, letters were sent to everyone on the WPH mailing list. Recruitment was also conducted through local community organizations, cancer survivor groups, community mailing lists, and various networks (Table 10).

Table 10

Recruitment Matrix

Categories	Methodology	Trainee Requirements
Survivor speakers	Letters	Interpersonal communication skills
Lay health educators	Oral presentations General media	Ambulatory Accessible by phone 21 or older Ability to read and write.

Source: Thompson et al., 2009.

Thompson et al. (2009) note that these recruiting procedures were consistent with the latest findings that the two most effective methods of recruiting were word of mouth and the media (p. 270). The recruitment focused on African American women. These women were considered eligible for training as LHWs if they:

1. Had strong interpersonal skills
2. Could travel freely and were without physical impairment
3. Had access to a telephone and could be reached as needed
4. Showed evidence that they were at least twenty-one years old
5. Could read and write (Thompson et al., p. 270).

LHWs were paid twenty-five dollars for each program they helped to conduct.

Thompson et al. (2009) presented a full outline of the training curriculum for LHAs (p. 269). As we observed with other projects described above, the greater portion of the curriculum was devoted to skills based knowledge (Table 11). This study,

however, devoted a small portion of time to the American Cancer Society guidelines for survivors relative to diet and exercise (p. 269).

Table 11

Training LHW to Promote Post-treatment Surveillance

Training Topics	Category	Training Methods
Introduction: Survivor Speaker Roles	SBK	Role playing Small group Training
Defining recurrence of breast cancer	RHK	
Epidemiology of breast cancer recurrence	RHK	
ASCO guidelines for post-treatment cancer surveillance	SBK	
Second primary breast cancer	RHK	
Generic risk for breast cancer recurrence	RHK	
Attitudes and beliefs about post-treatment	SBK	
Diet and Exercise	RHK	
Resources: review data, study diet and exercise	SBK	
Instructions in breast self-examination	SBK	
Primary experimental component: review and practice	SBK	

Source: Thompson et al., 2009.

Addressing the health care needs of African Americans was the objective of the Johnson et al. (2009) and the Thompson et al. (2009) studies. Each study was approached from a different perspective, and each approach was congruent with its purposes and goals. The Johnson study utilized the CHARP program, which is designed to bring trainees and researchers together in designing, planning, and conducting research, while the Thompson study utilized the Survivor in Spirit (SIS) approach. Each project obtained positive results. It should be noted that in selecting a training protocol for any project, the research design should be influenced by the written objectives of the study.

O'Brien et al. (2009) conducted a significant study of the selection and training practices in the training of CHWs. A total of 44 articles were included in this O'Brien et al. research initiative (p. 4). In reference to their work the researchers state:

The main purposes of this study are: (1) to perform a summative content analysis of selection and training processes in published CHW intervention studies; and (2) to present a conceptual model of CHW role development—informed by the current analysis—that will guide future researchers when reporting CHW selection and training processes. (p. 2)

O'Brien et al. (2009) designed a format (Figure 1) that can be used by researchers and investigators involved in the training of CHWs. This model may be utilized to direct the collection of data, the utilization of that data, and the reporting of the data in the research literature. It is the researchers' opinion that:

Consistent reporting of CHW selection and training will allow consumers of intervention research to better interpret study findings. A standard approach to reporting selection and training processes will also more effectively guide the design and implementation of future CHW programs. (p. 1)

It must be noted that the O'Brien et al. (2009) study was based on a review of the literature used in the 2007 HSRA Community Health Worker National Workforce Study (p. 3). O'Brien et al. note that, in addition to the review of that literature, a secondary search was conducted of published articles chronicled between 2005 and 2008 (p. 3). From a review of the literature, the framework outlined by O'Brien et al. is included in this research as a basis for cataloging training content materials, and outlining the selecting and training processes utilized in those studies. The O'Brien et al. study provides us with a process for cataloging instructional subjects in the areas of skills based knowledge (SBK), relevant health knowledge (RHK), and research implementation knowledge (RIK) in literature under review (p. 5). In addition, O'Brien et. al. noted that one of the purposes of their study was “to present a conceptual model of CHW role

development...that will guide future researchers when reporting CHW selecting and training processes” (p. 2). That framework is presented here for review (Figure 1):

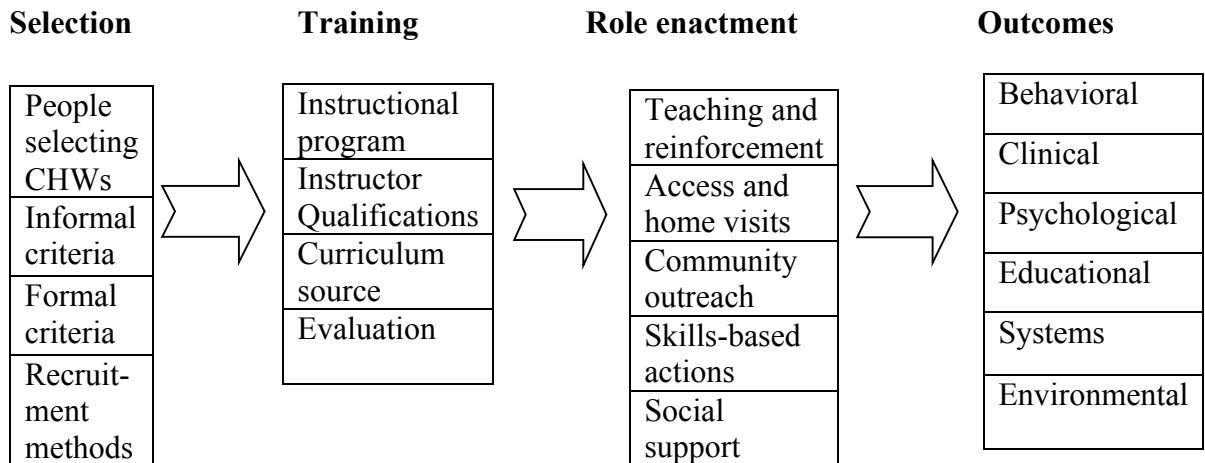


Figure 1. Conceptual model of CHW.

O’Brien et al. (2009) gave general information about the selection process of CHWs as identified in the 44 articles they reviewed. The researchers state, “The most commonly reported feature of CHW selection was a list of desired personal qualities, such as interest in the subject material, willingness to learn, and compassion” (p. 4). Their research also pointed out that many authors noted that trainees had leadership skill and were already serving as CHWs in their communities. In reference to programs serving Asians, Native American, or Hispanic communities, the researchers simply stated that “Bilingual status was required in only four of 19 of programs” (p. 4). Also, only four of the 44 studies mentioned a high school diploma or its equivalent as a requirement for trainees, and only one study required a formal application and an official interview (p. 4).

In reference to the training of CHWs as recorded in the O’Brien et al. study of 44 articles, only 59% recorded any discussion about the process. Training time periods

varied from five hours to six months (p. 5). Additionally, only 9% of the studies described the professional achievement of the trainees. The study further notes, “The most commonly used pedagogic methodologies for training CHWs were role playing, didactic sessions, and mentored one-on-one learning. Three studies described follow-up assessments to evaluate the efficacy of CHW training” (p. 5). General curriculum topics included all three categories: skills based knowledge, relevant health knowledge, and research implementation knowledge (p. 5) (Table 12).

Table 12

O'Brien et al. (2009) Training Topics

	Category
Clinical Skills	SBK
Interpersonal Skills	SBK
Managerial Skills	SBK
Targeted disease	RHK
Diet and health	RHK
Study protocols,	RIK
Ethical concerns	RIK
Confidentiality	RIK
protecting human subjects	RIK
Survey administration	RIK
Subject recruitment	RIK

O'Brien et al. (2009) note:

Of these three areas, the majority of CHW training was devoted to SBK, including clinical skills, interpersonal skills, and managerial skills. Training on interpersonal skills was particularly prevalent in programs in which CHWs were expected to lead support groups and serve as case managers. Managerial skills, such as team and relationship building, record keeping, time management, and navigating resources were covered by a majority of CHW training programs. (p. 5)

Relevant health knowledge included information connected with the disease under study, and some training programs included information on healthy eating and lifestyles changes as a basis for improving health (p. 5). Research implementation

knowledge topics were included in about 33% of the studies. “Common topics for research training included reviewing study protocols, discussing ethical concerns and confidentiality, protecting human subjects, and teaching procedures for survey administration and subject recruitment” (p. 5).

Summary

Cherrington et al.’s (2008) project was a study of 16 community health worker training programs. Instruction on the specifics of the disease was the subject covered in all training programs while interpersonal skill was the area least addressed. Only one quarter of the programs provided instructions in this area.

While the Cherrington et al. study analyzed 16 programs, O’Brien et al.’s (2009) study reviewed 46 projects. The O’Brien et al. research gives us a summary of the recruitment and training processes uncovered in the published articles. It was noted that in the selection process, trainees were generally selected on personal qualities such as willingness to learn and interest in the subject matter. Relevant health knowledge covered information about the disease and some programs included information about diet and health. O’Brien et al. provided a system for reporting and cataloging recruitment and training data in future research studies.

The best method for recruiting and training CHWs should be determined by the needs of the research project or program, as observed in the Thompson et al., 2009 study, which was designed to train LHWs promote post-treatment breast cancer surveillance in African-American breast cancer survivors. Our training methodology, recruitment, and curriculum design will reflect this concept and research design.

CHAPTER 4

IMPLEMENTATION AND METHODOLOGY

Selection Process

The ultimate goal of the project was to select and train eighteen members from the Sharon Seventh-day Adventist Church to serve the church community as lay health educators. The Sharon Seventh-day Adventist Church elected members to function as health and temperance leaders for a term not exceeding two years. Consequently, this training was designed to provide trainees with the basic tools in health education that would equip them to work as lay health workers within their church. All trainees were expected to complete the full training program. In addition, they were expected to attain the competencies to deliver health education training programs and workshops to the church community upon completion of the project. The initial selection process was limited to recommendations from the church pastor and senior church officials.

The selection process for trainees was broken down into two phases. Under the leadership of the pastor, 10 individuals were selected during the first phase. Four of these individuals had prior training or experience as health professionals, and six participants had no prior training in health education. Although data collected for this project was not disaggregated for a category such as prior training in health education, a conscientious effort was made to include trainees with this professional health background. These

trainees would be assets for the training initiative in monitoring quality control and leading out in individual and group research presentations.

During the second phase of the selection process, eight additional trainees were accepted into the program. Two of these trainees had prior training in health education or had previously worked in a health-related field. These prospective trainees were admitted from recommendations of the initial trainees, and they served as a safety net in the event of trainee attrition. The phase one and phase two recruitment drives yielded a total of 18 trainees who registered and were accepted into the program. Ten participants were from the phase one recruitment initiative and eight from the phase two recruitment drive. Eleven trainees graduated from the program.

Informed Consent and Training Procedure

The informed consent form requested information related to the purpose of the study, benefits, risks, confidentiality, and voluntary participation. All participants read and signed the document agreeing to participate in the training.

The first training session was announced as general information for church members. Congregants were reminded about the importance of maintaining good health and invited to register for the first three-hour training session. A total of 15 registered members completed the first day of training. Trainees received an overview of the program, and received information about completing coursework for any missed session. In addition, trainees participated in small group discussions about diseases that were prevalent in their church and in their communities. They also requested information about the following diseases: diabetes, cardiovascular disease, and cancer. The course outline presented for the training program was as follows:

Primary/Basic Human Needs

1. Water
2. Exercise
3. Rest and Relaxation

Wholesome Foods and Unhealthy Foods

1. Plant Foods (Natural Foods)
2. Mankind's Provisions at Creation
3. Cancer Prevention Diet
4. Processed Foods
5. Red Meat

Diseases

1. Heart Disease
2. Diabetes
3. Cancer

Health Measures/Indicators

1. Lower Back Pain
2. Metabolic Syndrome
3. Triglycerides
4. High Blood Pressure
5. Cholesterol

Religious/Spiritual Factors and Health

1. Health as a Christian Leadership Mandate
2. Contributions of Ellen White
3. New Testament and Health

Training Procedures/Methodologies

1. Small group
2. One on one
3. Large groups
4. Use of experts
5. Interactive session
6. Lecture
7. Main focus on video and research documents
8. Trainee research presentations

The training program was scheduled for seven weeks. Students met one day each week for the three-hour session, and they were assigned study activities to be completed between class meetings. The format for work sessions included, but was not limited to,

oral presentations, video support materials, group discussion and reports, and individual presentations from trainees.

Number of Studies Reviewed

At the beginning of the literature review, attention was given “what” and “how” lay health workers should be trained. Training methodology impacts learning, therefore, attention was given to the use of different teaching and learning styles. In reviewing research articles for this training project, consideration was given to two beliefs held by many Christians: firstly, that life-style impacts health, and secondly, that the Bible speaks directly about eating in moderation with intent to glorify God. Attention was also given to the Adventist belief that the biblical mandates relative to clean and unclean meats in Leviticus, concomitant with their emphasis of purity and holiness unto God, apply equally to Christians today.

A review of the literature revealed a plethora of research articles with several variations relative to health, training, and church-based health program initiatives. The articles selected for the current study were finally limited to the following areas:

- training community health workers,
- staff training initiatives
- the linkage between religious/spiritual factors and a healthy life style
- the impact of diet and lifestyle on health
- church-based health program initiatives.

A quick overview of the data below indicates that a substantial portion of the research articles available for study fell under two broad categories: (a) Training CHWs,

and (b) Religious/spiritual factors and health. A total of 128 articles were reviewed as follows:

Training CHW	36
Training Initiatives	11
Religious/spiritual factors and health	46
Life-style, diet and health	29
Church-based health programs	06

Research articles studied provided relevant and detailed data about each public or church-based health initiative. Some studies described training methodologies. Other studies highlighted the effect of social capital within the church community in fostering health reform among members, and a few emphasized the importance of developing a training manual prior to initiating the training process.

Participants and Survey Questions

The age range of participants who completed the program varied from 41 to 70. Eight trainees were females and three were males. Surveys indicated that nine trainees had prior knowledge in health education or had participated in a health education program, and that two had no prior knowledge in health education and had not participated in a health education program. One trainee was a medical doctor. The research surveys, administered prior to training, requested information relative to the following project questions:

- How important is exercise in maintaining good health?
- How important is sleep and rest in maintaining good health?
- How importance is drinking an adequate amount of water on a daily basis in maintaining good health?

- How significant is consumption of meats and meat by-products in leading to heart disease and other ailments?
- How important is the consumption of plant foods (natural foods) in maintaining good health?
- To what extent will the consumption of processed foods negatively affect your health?
- Have you previously studied or worked in a health-related field?
- What do you think might be the five greatest contributing factors negating positive lifestyle changes in your community?

Research/Project Design

The research process and design was a single training unit of 18 members, selected to receive lay health worker training. After reviewing the literature relative to the recruitment and selection of trainees in various programs, attention was given to several factors that may affect content mastery and trainees' leadership performance in this training program. The literature identified academic background, leadership or prior training, as elements for consideration in selecting trainees in various training programs. At the conclusion of the review, the factors identified and selected that would positively promote trainee growth and future leadership performance in this study included:

1. Academic background: bachelor's degree
2. Proven personal leadership skills
3. Prior health education training
4. Current involvement in church leadership initiatives
5. Age factor: 35-60 years old
6. Experience in use of technology.

In consideration of these factors, the research design provided for supplementary training beyond the standard training for participants. Supplemental training was designed for participants who fell into three broad categories: professional health workers, computer skill related trainees, and church leadership participants. Although these supplemental sessions were not required for the completion of the program, they continued to be an additional source of development for all health-training participants.

Final Training Session

The training and curriculum manual was released on the sixth day of training and subsequently updated at the beginning of the final session. The final session was a summary of lessons learned and a review of the supporting videos presentations. Students shared personal information from health articles gathered during their private studies and participated in reorganizing the materials in their training manuals. Trainees received instructions about the completion of their final surveys and asked questions about the supplemental training initiative. The final 30 minutes of the session were devoted to discussing various ways trainees might begin supporting their local church and community as lay health workers.

Qualifications of the Trainer

The trainer is a certified teacher, a certified administrator, and a graduate of the Complete Health Improvement Program (CHIP) as directed by Dr. Hans Diehl of Loma Linda University. The training program included the contributions of a medical doctor, a medical inhalation therapist, a certified nurse/associate director of nursing, and a medical histologist.

CHAPTER 5

RESULTS, CONCLUSIONS, AND RECOMMENDATIONS

Results

In this chapter, we will examine the results of the training initiative by reviewing the trainees' responses to the impact of the training program. Firstly, we will consider their views in initial and post survey data about the importance of positive lifestyle factors (exercise, sleep, water, and plant foods) in contributing to good health. Secondly, we will examine any change in participants' beliefs about the effects of harmful food choices (processed foods and meat including its byproducts) as causal factors in leading to various diseases. Thirdly, we will examine the participants' responses about the practical behavioral impact of the training program. Fourthly, we will present an analysis of the data obtained. And lastly, we present a conclusion and summary of this study.

Survey Data: Positive Lifestyle Factors

The basic health needs identified for this training program were: (a) 30 minutes of exercise five times per week, or a medically prescribed exercise program or routine-exercise protects against cancer (World Cancer Research, 2007, p. 376). (b) Adequate sleep of six to eight hours per night or as recommended by medical personnel--seven to eight hours of sleep per night is associated with lower risk/incidents of cardiovascular disease (Luyster, Strollo, Zee, & Walsh, 2012, p. 730). (c) Intake of approximately three

liters of water each day (World Cancer Research Fund, 2007, p. 151). (d) The use of plant foods as a main ingredient in daily meals and as a primary source of nutrients (World Cancer Research Fund, 2007, p. 380). In this study, plant foods are identified as foods that were prescribed in Eden as mankind's original diet. Plant foods (natural foods) include naturally grown provisions such as grains, beans, vegetables, fruits, nuts, leafy greens and ground provisions.

Exercise

The data shows that at the onset of the training program two trainees perceived that exercise was "somewhat important" for maintaining good health. At the end of the training initiative, 10 of the 11 trainees felt that exercise was "very important."

Sleep

Initial surveys revealed that trainees believed sleep was "important" or "very important" to maintaining good health. Summative survey data showed no change in participants' perception.

Water

Initial survey data indicated that trainees believed that an adequate intake of water was "somewhat important," "important" or "very important." Final survey results indicated a shift in perception. Two participants stated that an adequate intake of water is "important" and nine considered it to be "very important."

Plant Foods

Initial and post survey data were constant relative to the importance of plant foods and good health. All trainees stated in initial and post surveys that the consumption of plant foods was “very important” for maintaining good health.

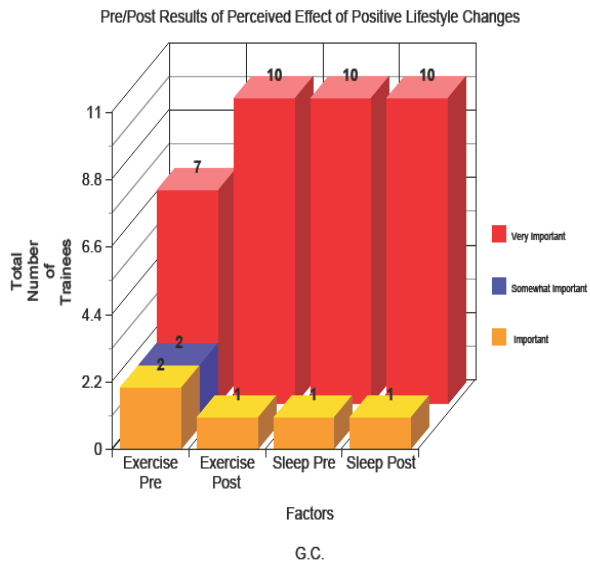


Figure 2: Pre-post survey data for exercise and sleep.

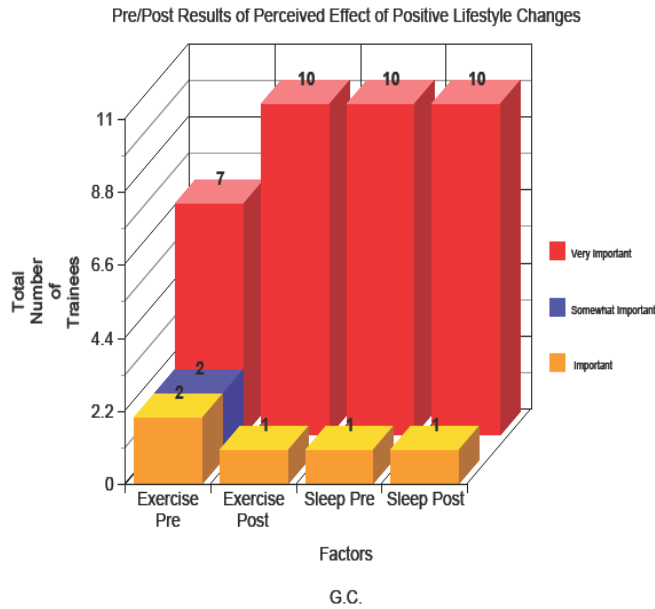


Figure 3: Pre-post survey data for intake of water and plant foods.

Harmful Food Choices

In this study, harmful food choices were labeled as (a) meat and its byproducts and (b) processed foods. Results were as follows:

Meat and Byproducts

The question trainees considered during the initial survey was whether the consumption of meat and its byproducts would have a negative impact on health. The initial data showed that all trainees believed that meat and its byproducts would have a “significant” or “very significant” negative impact on human health (World Cancer Research Fund, 2007, p.128). The final survey revealed that 10 trainees believed that the consumption of meat in any form would have a “significant” or “very significant”

negative impact on human health. One trainee indicated that the consumption of meat or its byproducts would not have a “significant” impact on human health.

Processed Foods

Results indicated that there was little change in trainee perception of the dangers of processed foods. Initial trainee view was that the consumption of processed foods would have a “significant” or “very significant” effect in contributing to poor health (See Monteiro, 2009). Summative survey results showed that while 10 trainees maintained their initial view, one trainee indicated that processed foods would have an “insignificant effect” in contributing to a person’s poor health.

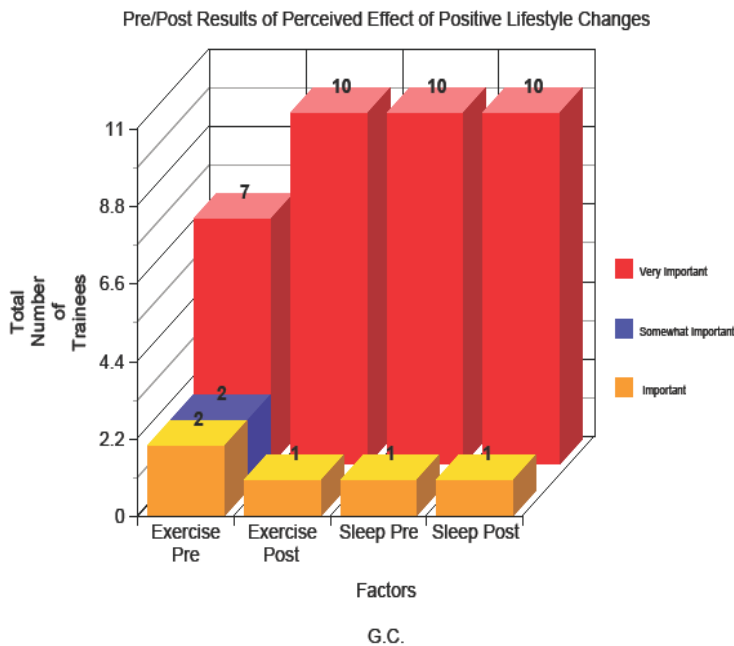


Figure 4: Pre-post survey data of consuming meat and byproducts.

Impact of Training

Participants were asked to rate the impact of the training program, and make recommendation for the improvement of a subsequent study or training initiative. The

table below shows their responses based on the parameters for each of the selected factors.

Table 13

Results of Training Program in Initiating Changes

Factors	Number of Trainees			
	Not Effective	Somewhat Effective	Effective	Very Effective
Value of training on improving personal exercise routine.	1	-----	3	07
Value of training on increasing water intake.	-----	-----	4	06
Value of training on increasing usage of plant foods.	-----	1	1	09
Value of training on improving your knowledge about sleep.	-----	-----	1	10

Numerals indicate number of trainees.

Respondents were also asked to evaluate the effect of the curriculum content relative to human consumption of meat and processed foods. Nine trainees indicated that the information relative to meat was “very effective” and two respondents indicated that it was effective.” Ten participants indicated that the information presented relative to processed foods was “very important” and one stated that it was “important.”

Table 14

Recommendations for Improvement of Training Program

Factors	Number of trainees
Increase curriculum content in theological foundation.	4
Increase curriculum content in current research.	7

Analysis

An analysis of the data shows little shift in trainees’ views relative to the effect of exercise, sleep, water, plant foods, and processed foods on human health. Consistency in participants’ perceptions may be attributed to various determinants:

- Prior knowledge: Participants may have responded to survey questions based upon knowledge they gained from life experiences.
- Small sample factor: The sample factor was too small to show a shift in trainees’ perception of each item analyzed.
- Prior training: The data showed that trainee responses were constant in four of the six factors reviewed below. It is somewhat reasonable to conclude that for those health-related factors in which trainee responses remained constant (sleep, water, plant foods, and processed foods), participants’ prior training in health education or employment in a health-related field contributed to identical responses. Six of the 11 participants indicated that they had prior training in lifestyle changes and maintaining good health.

The two other factors, identified and reviewed in this analysis that affect human health (exercise and meat and its byproducts), showed a shift in trainee responses.

Exercise

In reference to the question relating to the importance of maintaining a basic exercise program, it is generally expected that all trainee would state that exercise is “very important.” Initial data showed, however, that trainee responses fell into three categories: “somewhat important,” “important,” and “very important.” Although the summative data did not reveal that all trainees viewed exercise as “very important,” the data shows a positive shift in trainee perspective. At the end of the program, ten of the eleven trainees indicated that exercise was “very important” in maintaining good health. The change in trainee responses for exercise may be partially due to participants’ understanding that an effective exercise program can be adopted in the confines of a home, and that regular trips to a gym for rigorous activities were not necessary.

Meat and its Byproducts

Changing views about the consequences of the consumption of meat were positive. Ten respondents indicated that the consumption of meat and its byproducts would have a “significant” or “very significant” negative impact in maintaining a healthy lifestyle. One respondent, however, indicated that meat consumption was “not significant” in leading to heart disease and other ailments.

Sleep, Water, Plant Foods, and Processed Foods

There was no significant shift in respondents’ perception about the importance of sleep, the adequate intake of water, and the consumption of plant foods in attaining good health. In reference to these three factors, trainees retained their previous belief that they are “important” or “very important” for the preservation of human health. In reference to

processed foods, ten respondents retained their previous belief that they would have a “very significant” negative effect on health. One trainee, however, described it only as a “significant” negative effect.

Summary

The literature reviewed relative to training lay health workers focused on the following main topics:

- Recruitment
- Selection process
- Curriculum
- Training methodology
- Duration and hours of training program
- Training manual
- Pastoral leadership and support

We will discuss these seven subjects in three the following sections below, and then consider topics for further study.

Recruitment and Selection

The recruitment process was geared to enlist individuals with leadership and/or health related training skills to serve the church community. A direct recruitment process was implemented to select and register members possessing those qualities. Church leaders identified and recommended individuals who were willing to participate in the training program (phase 1 selection). After the first group of trainees was registered, additional trainees were later considered from recommendations of registered trainees

(phase 2 selection). Selection of all participants was based on willingness to participate for the duration of the program, evidence of leadership skills, and prior training or experience in health education. Participants were admitted if they fell into at least two of these three categories. The goal was to train eighteen members of the church. Eleven trainees graduated from the program.

Curriculum and Training Methodology

The curriculum was designed to provide trainees with the basic knowledge needed to begin implementing a successful health reform program. Attention was given to the benefits of drinking adequate amounts water, eating plant foods, and following a meaningful daily exercise routine. The curriculum addressed some of the root causes of heart disease and other ailments. The goal of the training was to examine some of the causes of these diseases rather than to produce a plethora of foods that may be harmful to the human body.

Although the curriculum content was exhausted as designed, attention may be given in future training for the addition of new content to broaden the scope of the training.

New content may include the following topics:

- Measuring blood pressure
- Choking and the Heimlich Maneuver
- Mouth to mouth resuscitation
- Measuring pulse rate
- Injuries and restricting blood loss from major arteries
- Measuring body temperature
- Elements of a balanced diet.

The new content will go beyond the scope of any training geared to address the basics for healthful living, but it will add to the repertoire of tools trainees will have when working with individuals in emergency situations.

The training methodology included use of media, use of an expert, group discussions, and lectures. The topic under discussion generally dictated the format for each study session. Lectures were often supplemented with use of media presentations.

Training Duration and Curriculum Manual

The training period and contact hours were adequate to cover the curriculum content, and was also similar to time on task in other researched-based training programs (See Dodani & Fields, 2010; O'Brien et al., 2010). The seven weeks of training time allowed trainees to assimilate the curriculum content, and was adequate for a final review session that included the completion of the post survey research data. The training manuals were disbursed at the beginning of the sixth session causing new motivation for the trainees to complete the program.

Conclusions

The author's conviction and conclusion is that pastors should assume a more direct role in leading their congregants in healthful living as outlined in Christian Scripture (Bopp et al., 2013; Maricruz Rivera-Hernandez, 2016). An examination of these researchers' contribution in this summary is not an attempt to nullify the work of other researchers on this subject. The reason for their inclusion in this summary is that Bopp et al. articulate the reasons why clergy must be intimately involved in church-

related health endeavors, and Rivera-Hernandez outlines how churches can be organized to deliver effective health services and initiatives. There is no paucity of studies that positively confirm the direct relationship between spiritual/religious factors and health. Maricruz Rivera-Hernandez and Bopp et al., however, give light to the pastor's role as a leader in laity health education.

Maricruz Rivera-Hernandez

The Maricruz Rivera-Hernandez's report for the Center for Gerontology and HealthCare Research, School of Public Health (2015), was entitled, *The Role of Religious Leaders in Health Promotion for Older Mexicans with Diabetes*. In this study, the author states, "Most religious leaders agreed that people put trust in them and rely on their advice, guidance and information regarding all aspects of their life. As such, they believed they had a strong influence on people's health behaviors" (p. 5). This theme of health behavior is also present in Paul's writing when he states,

What? Know ye not that your body is the temple of the Holy Ghost *which* is in you, which ye have of God, and ye are not your own? For ye are bought with a price: therefore, glorify God in your body, and in your spirit, which are God's. (1 Cor 6: 19-20)

In light of this understanding that godliness and care for the body are inextricably intertwined, the following questions were investigated in the Rivera-Hernandez study:

1. How important is health ministry as a function in pastoral care?
2. How should a church be organized to deliver dynamic health-related services to congregants?

Importance of Health Ministry

In reference to laity health and pastoral leadership in this arena, Rivera-Hernandez accedes that “Health is part of many religious institutions' holistic mission” (p. 2). The study outlines that “Faith leaders are important in developing and implementing health interventions,” and that in the process of executing these services, “religious leaders must be involved from an early stage and throughout the process of the program” (p. 2).

Rivera-Hernandez also describes pastors as “community gatekeepers who have access to community members and can deliver information to health care providers and the congregation” (p. 2). It seems reasonable to conclude that Rivera-Hernandez places health ministry very high on the list of the pastor’s responsibilities.

Delivering Health Ministry Services

After studying a Bible text on the importance of maintaining good health, a pastor can deliver a homily exhorting believers to adopt a healthier lifestyle. But how does a pastor organize his church to discharge an effective and practical health ministry program?

Firstly, Rivera-Hernandez utilizes the research of Catanzaro et al (2006) to address this subject. In that research, the authors note that some churches have an organized Community Health Ministry (CHM), which is under the control of a coordinator (p. 6). These ministries are designed specifically to deliver church-related health services to congregants. In describing the inception of this ministry, the authors state, “Since the mid-1980s, there has been a growing movement in the United States that promotes the organization of health-related services by religious congregations under the coordination of a layperson, usually a registered nurse.” This ministry provided

community health services for the disabled and home-bound members (p. 6). The authors note that current health ministries focus primarily on health promotion themes and disease prevention practices in addressing the health issues within their FBO (p. 6).

In addressing a second health ministry strategy, Rivera-Hernandez points out the need for ministers to proffer specific health-related interventions to address various diseases. He concurs, “Faith leaders are important in developing and implementing health interventions. Religious leaders may encourage congregants to be part of an intervention and may be seen as role models (Baruth et al., 2008, p. 3).

The need for the establishment of effective clergy-directed health ministries is built on the premise that health education is a part the church’s mission. Additionally, religious institutions or faith-based organizations (FBOs) are strategically and uniquely poised to deliver health care initiatives and Scripturally-based health programs to their adherents. Ministers have the human and physical resources available to their FBOs as they undertake a greater leadership role in health care endeavors. Rivera-Hernandez alludes to the benefits congregants derive from health-related interventions and points out the ongoing relationship researchers have had with faith-based organizations.

FBOs have resources and facilities that could be used to evaluate health interventions (Campbell et al. 2007). In addition, FBOs are culturally appropriate venues to conduct promotion activities (Catanzaro et al. 2007). Based on these considerations, researchers have explored the benefits of conducting health programs in FBOs. For over two decades, interventions ranging from nutrition and physical activity education (Young and Stewart 2006) to diabetes prevention and management (Dodani and Fields 2010) have been delivered in religious settings. These programs have been particularly useful for minority groups, which are more likely to lack health insurance and access to health services (Martin 2011). (p. 2)

It is my view that local church health programs and goals are very important for the success of the FBO's mission. The study outlines a structure pastors may use to deliver these church-based interventions.

Melissa Bopp

Bopp et al. (2013) explores the research topic entitled "Clergy Health and the Role of Clergy in Faith-Based Health Promotion Interventions." In that project, the researchers clearly state:

The purpose of this review was to examine current issues associated with the health, behaviors, and well-being of clergy, highlight the literature on the role clergy play in delivering effective health promotion interventions, and present recommendations for improving clergy health and the involvement of clergy in faith-based initiatives. (p. 182)

The section of their purpose relevant to this summary is: *the involvement of clergy in faith-based initiatives*. This research speaks directly to the need for pastors (a) to counsel congregants on physical/mental health issues and improving health behaviors (p. 186), (b) to obtain professional training in health education issues (p. 187), and (c) to play a more direct leadership role in the promotion of health programs in their local churches (p. 186). The authors presented four arguments in support of their convictions as follows:

- The church's ability to reach the socially underserved
- The church's potential as an effective community organization
- The need to focus on clergy health
- The importance of seminary training on health-related issues.
- The church's ability to reach the socially underserved

Bopp et al. underscore the findings that there is a link between religion and health. The researchers conclude that since faith-based organizations reach a wide spectrum of believers, they retain the power to influence not only the affluent of society, but additionally the hapless and underserved.

Faith-based organizations serve as a strong community partner for potential health promotion initiatives in their ability to reach across many demographics and work with many groups that are traditionally underserved. Several reviews have highlighted the literature of a link between religion and health¹¹⁻¹⁴ and effective faith-based approaches to health promotion,^{3,11-14} suggesting FBOs provide a venue for tailored health promotion strategies. (pp. 182, 183)

Secondly, Bopp et al. points to prior research identifying approaches that FBOs may take in developing health-related initiatives in their churches. The researchers reviewed the study conducted by Bopp and Fallon (2008) and extracted the following approaches that FBOs may use in fostering health-related undertakings:

1. Utilization of educational and physical activities such as aerobics that reflect the ethnic and cultural make-up, faith values, and beliefs of the congregation.
2. Targeting social capital and utilizing the building facilities of a church organization
3. Implementation of exercise breaks periods during faith-based organizational meetings (p. 178).

These approaches are not exhaustive, but they serve as a guide as FBOs begin to develop their health programs to include services for the underserved.

The Church's Potential as an Effective Community Organization

Bopp and Fallon conclude that the church has far-reaching tentacles that can affect the norms and beliefs of a society. This broad reach gives ministers the opportunity

to affect social changes within the larger geographical community. In support of their belief, the researchers affirm, “Theories of organizational change for improving health behaviors and health outcomes emphasize the importance of key leader involvement to target the social and physical environment, relevant policies, and cultural norms” (p. 183). Since these organizations can influence a large portion of the population, they are strategically aligned to influence laity health and consequently to have a broader impact on the health of a society.

Faith-based organizations reach a large portion of the population within the United States and remain an influential community institution. The clergy members who lead these organizations have significant influence on the daily functioning, programs, policies, and social or cultural environment within these organizations, creating suitable, and perhaps ideal, situations for helping clergy “lead their flock” to health. (pp. 189, 190)

The direction of the researchers’ argument, is that the scope of the clergy’s influence within the church and in the larger community, provides the clergy with the mandate to lead his/her congregation in health initiatives as supported by Christian Scripture, religious texts, and doctrine. The belief is that there would be a concomitant impact on the social norms and spiritual beliefs of the larger community.

The Need to Focus on Clergy Health

Bopp et al. (2013) argue that clergy health could significantly affect the health of the local church community. They explain, “the health status and behaviors of clergy have the potential to influence the health-related environment of their FBOs and influence the effectiveness of health promotion interventions” (p. 189). They add that while attention to the laity health matters remains a Christian ministry goal and mandate,

attention must be given to understanding clergy health, and its effect on church-related health initiatives.

Clergy represent an important key leader in community institutions that can potentially reach millions of individuals on a weekly basis.¹⁰ Therefore, the well-being and health-related quality of life of the clergy are an essential element in faith-based health promotion initiatives. The health of the clergy can influence the health environment of FBOs⁴⁷; therefore, there is merit in both further understanding clergy healthy outcomes and influences on health and designing interventions to improve clergy health, health behaviors, health knowledge, and attitudes toward health. (p. 186)

The authors conclude that if the clergy must lead in promoting health reform and in implementing programs designed to improve community health, they must not only lead by precept, but also by example.

The Importance of Seminary Training in Health-related Issues

The Maricruz Rivera-Hernandez (2015) study addresses the opinion that seminaries should provide clergy with professional instruction on health and wellness-related topics. In that project, pastors explained the need for the clergy to receive specific instruction in diabetes management measures (p. 7). One of the pastors states the following:

Some pastors get different health care classes and certificates... some get trained in different universities around the world such as Rome, Germany and Spain and share what they learned with the community. For example, there is one father who teaches bioethics (about how to treat patients and the link between medicine, religion and spirituality) to physicians and other health professionals... also there are some physicians ordained as priests... if someone offered me a class about diabetes, I would take it. (p. 7)

This notion of the incorporation of health education in seminary curriculum was also reviewed in the Bopp et al. (2013) study. These researchers examined prior studies and analyzed the impact that health literacy instruction could have on clergy efficacy.

The opinion also in that study, was that seminary school-based instruction on health matters, could subsequently bolster the development of clergy-directed social networks for disseminating information on community health issues. In reference to their research, Bopp et al. (2013) point out,

One qualitative study noted that clergy expressed a lack of instruction in health information in seminary school and felt that this would have been a valuable topic to address.⁴² Interventions in this area could target not only enhance clergy health but also help students develop the skills needed for influencing the health environment for their future FBO, including instruction in health program planning and evaluation, volunteer recruitment, health communications and marketing, and policy development. Building self-efficacy for clergy members' own health behaviors as well as their self-efficacy for integrating health-related programs into their FBOs could serve as the basis for future interventions. Seminary school-based interventions may also serve as a place for fostering supportive social support networks among peers for individual and organizational-level changes. (p. 187)

It seems logical to assume that as clergymen accept a more distinctive leadership role in church-sponsored health education initiatives, their seminary training should include content in diet, fitness, and human well-being.

Further Study and Alternative Approaches

After reviewing the format implemented for conducting this study, the following items may be added to a future selection process:

1. A direct effort should be made to recruit a larger percentage of younger trainees.
2. Consideration should be made to remunerate participants for attending training sessions.

Although the literature is replete with content relative to lay health worker training initiatives, further study may be given to the following specific topics in lay health worker training:

1. Developing church-sponsored lay health worker training curriculum and manuals.

2. Effectiveness of lay health worker training programs in the church community.
3. Developing and implementing youth-sponsored and directed community health worker trainings.

Church-sponsored LHW training initiatives should benefit the younger and older members alike, and ongoing research in this field should lead to healthier and more vibrant church families, and also to a much healthier citizenry.

Recommendations

The recommendations stated here are guidelines for assisting various communities in designing health-related programs for their organizations. These recommendations are not exhaustive, but may be helpful in designing church leadership health seminars and workshops for any organization.

Academic Communities

Colleges and schools of graduate studies can set the pace for the development and ongoing professional training of clergy in health education by incorporating health ministry as an important component of pastoral service for congregants. As ministers review studies relative to factors impacting clergy health and the well-being of various ethnic communities within their constituencies, the knowledge they gain will be useful in designing their unique health programs.

Colleges and Seminaries

All pastoral studies programs may begin with factors affecting clergy well-being and strategies for avoiding the pitfall of overwork and inadequate rest. An effective health curriculum should include attention to the following factors previously discussed:

- Daily intake of an adequate amount of water
- The health value of the consumption of a plant-based diet
- The harmful effects of consuming processed foods
- Factors impacting heart disease
- Factors impacting high blood pressure
- Health practices that may lower the prevalence of cancer
- Exercise as a weekly routine for clergy well-being

Studies in clergy health should not only focus on information about how to improve clergy health, but also on why and how recommended practices improve or impact our bodies.

Advanced studies programs should incorporate the development, and implementation of effective wellness health initiatives in church ministry. Pastoral training in health issues should include basic knowledge of various ethnic communities and prevalence of specific diseases within each community. Attention should be given to strategies for assisting minority communities in completing follow-up treatment in preserving heart disease and other ailments.

Church Head Offices and Conferences

Church head organization work in a supervisor capacity for local churches. They are then uniquely poised to influence the health of their clergy. These organizations may provide a health coordinator to work with local pastors in their church organizations. Their duties should be directed solely to supporting the personal health of their pastors and providing them with the tools for developing effective church sponsored health initiatives. The functions of the health coordinator should include:

- Ongoing training and workshops for pastors on laity wellness
- Improving clergy health
- Designing, building, and implementing local church health development initiatives

- Building an effective local health ministry
- Graduate programs for pastors in public health

In the selection of the health coordinator of the church organization the primary qualifications of nominee should always be the qualifications of the candidate. A degree in public health or its equivalent is an excellent starting point.

Health Systems

Health systems can provide the human resources for training of health teams in local churches. The head office for church denominations may act as a liaison between local churches and the health system. This procedure should be most effective in streamlining the planning and implementing phases of any corporative health program initiative between the health system and various local churches.

Health system personnel should be used to assist in training the local pastor and his/her health education team. This will allow for a more effective usage of the skills provided by the health system. Laity workshops and training should be delegated to the pastors and their health ministry team

APPENDIX A

Church Bulletin Letter

Andrews University 8975 US-31

Berrien Springs, MI 49104

Dear Church Members,

We are all aware of the importance healthful living. There is so much to be learned in this field and so little time to study it. Elder _____ will be conducting a health training program at our church in conjunction with Andrews University. One of the objectives of the program is to assist church members in studying the basic health principles that will lead participants to make positive lifestyle changes.

Church members who desire to participate in this program may contact him for further information. His number is _____.

APPENDIX B

Concluding Survey

Glenn Cassimy

1. What is your age?
21-30 ___ 31-40___ 41-50___ 51-60___ 61-70___
2. What is your gender?
Male ___Female___
3. Have you had prior instructions in lifestyle changes related to health?
Yes ___ No ___
4. How effective was this training program in initiating lifestyle changes in your life?
Not Effective___ Somewhat Effective ___ Effective ___ Very Effective ___
5. What suggestions you will make to improve this training program?
Increase Bible Instructions___ Increase Current Research___
6. Will you use the information in this program in your personal life?
Yes___ No___
7. How can this program be used in your church community?
No Usage___ Personnel Training ___ Workshops___ Church Health Min. Dept. ___
8. In your estimation, how important is exercise in maintaining good health?
Not Important___ Somewhat Important ___ Important___ Very Important ___
9. To what extent has this program been effective in improving you exercise program?
Not Effective___ Somewhat Effective ___ Effective___ Very Effective ___
10. How would you rank the information presented relative to exercise?
Not Effective___ Somewhat Effective ___ Effective___ Very Effective ___
11. In your estimation, how important is sleep and rest in maintaining good health?
Not Important___ Somewhat Important ___ Important___ Very Important ___

12. To what extent has this program been effective in increasing your knowledge about the importance of sleep and rest?
 Not Effective__ Somewhat Effective __ Effective__ Very Effective
 —
13. How would you rank the information relative to sleep and rest in this program?
 Not Important__ Somewhat Important __ Important__ Very Important__
14. In your estimation, how important is drinking adequate water in maintaining good health?
 Not Important__ Somewhat Important__ Important__ Very Important__
15. To what extent has this program been effective in improving your daily intake of water?
 Not Effective__ Somewhat Effective __ Effective__ Very Effective
 —
16. How would you rank the information relative to the importance of water in this program?
 Not Important__ Somewhat Important__ Important__ Very Important__
17. In your estimation, how significant is the consumption of meat and its byproducts in leading to heart disease and other ailments?
 Not Significant__ Somewhat Significant__ Significant__ Very Significant__
18. To what extent do you believe that meat and its byproducts contribute to poor health?
 Not Significant__ Somewhat Significant__ Significant__ Very Significant__
19. How would you rank the information presented in this program relative to meat consumption?
 Not Effective__ Somewhat Effective __ Effective__ Very Effective
 —
20. In your estimation, how important is the consumption of plant foods in maintaining good health?
 Not Important__ Somewhat Important__ Important__ Very Important__

21. To what extent has this program been significant in increasing your consumption of plant foods?
 Not Significant__ Somewhat Significant__ Significant__ Very Significant__
22. How would you rank the information presented in this program relative to plant foods?
 Not Important__ Somewhat Important__ Important__ Very Important__
23. In your estimation, to what extent will the consumption of processed foods negatively affect your health?
 No Effect__ Little Effect__ Some Effect__ Great Effect__
24. To what extent has this program improved your knowledge of the consequences of consuming processed foods?
 No Improvement__ Little Improvement__ Some Improvement__ Great Improvement
25. How would you rank the information presented in this program relative to processed foods?
 Not Important__ Somewhat Important__ Important__ Very Important__
26. Have you studied/worked or had prior training in a health related field?
 Yes ____ No ____
27. How significant was the organization of the materials in this training manual in contributing to your personal growth in health education?
 Not Significant__ Somewhat Significant__ Significant__ Very Significant__
28. How effective will be the materials presented, in guiding lay members to adopt positive lifestyle changes?
 Not Effective__ Somewhat Effective__ Effective__ Very Effective__
29. What do you think might be the five greatest factors that contribute to poor health of citizens in your community? Select ONLY five, and then rank them from greatest to the least. (1= Greatest, 5= least)
- Limited knowledge/understanding of health principles__
 - Time needed for daily exercise__
 - Limited time for food preparation__
 - Poor eating habits__
 - Few positive health models__

- f) Little/poor emphasis from church leaders on health-related issues ___
- g) Little training in good food preparation ___
- h) General emphasis on animal protein ___
- i) Food advertisements ___
- j) Little knowledge about importance of rest and water
- k) Lack of understanding of effect of poor lifestyle
- l) Little knowledge about processed foods ___
- m) Few health training advocates in church and community ___
- n) Unknown correlation between Scripture related diet and current research ___

APPENDIX C

Initial Survey

30. What is your age?
21-30 ___ 31-40 ___ 41-50 ___ 51-60 ___ 61-70 ___
31. What is your gender?
Male ___ Female ___
32. Have you had prior instructions in lifestyle changes related to health?
Yes ___ No ___
33. In your estimation, how important is exercise in maintaining good health?
Not Important ___ Somewhat Important ___ Important ___ Very
Important ___
34. In your estimation, how important is sleep and rest in maintaining good health?
Not Important ___ Somewhat Important ___ Important ___ Very
Important ___
35. In your estimation, how important is drinking adequate water in maintaining good
health?
Not Important ___ Somewhat Important ___ Important ___ Very Important ___
36. In your estimation, how significant is the consumption of meat and its byproducts
in leading to heart disease and other ailments?
Not Significant ___ Somewhat Significant ___ Significant ___ Very
Significant ___
37. To what extent do you believe that meat and its byproducts contribute to poor
health?
Not Significant ___ Somewhat Significant ___ Significant ___ Very
Significant ___

38. In your estimation, how important is the consumption of plant foods in maintaining good health?
 Not Important__ Somewhat Important__ Important__ Very Important__
39. In your estimation, to what extent will the consumption of processed foods negatively affect your health?
 No Effect__ Little Effect__ Some Effect__ Great Effect__
40. Have you studied/worked or had prior training in a health related field?
 Yes _____ No _____
41. What do you think might be the five greatest factors that contribute to poor health of citizens in your community? Select ONLY five, and then rank them from greatest to the least. (1= Greatest, 5= least)
- o) Limited knowledge/understanding of health principles__
 - p) Time needed for daily exercise __
 - q) Limited time for food preparation ____
 - r) Poor eating habits ____
 - s) Few positive health models ____
 - t) Little/poor emphasis from church leaders on health-related issues__
 - u) Little training in good food preparation ____
 - v) General emphasis on animal protein ____
 - w) Food advertisements ____
 - x) Little knowledge about importance of rest and water
 - y) Lack of understanding of effect of poor lifestyle
 - z) Little knowledge about processed foods ____
 - aa) Few health training advocates in church and community ____
 - bb) Unknown correlation between Scripture related diet and current research ____

APPENDIX D

Andrews University

Theological Seminary

INFORMED CONSENT FORM

Date _____

I am conducting a research study as part of my seminary project, in partial fulfillment for my Doctor of Ministry program at Andrews University, Berrien Springs, Michigan. Your participation in this study is greatly appreciated.

Research Title: Educating Volunteer and Non-Professional Health Educators in the Context of the Milwaukee Seventh-day Adventist Community.

Purpose of Study: The purpose of this study is to increase the knowledge of Seventh-day Adventist lay health workers about lifestyle changes that would lead to good health.

Durativo of participation in study: The research study will be for a period of approximately two months. I understand that I will be required to complete a survey at the beginning of this study and at the end. This survey will take approximately fifteen minutes of my time.

Benefits: There are two primary benefits for everyone who participates in this research: a) Participants will receive current research information on healthful living and b) Participants will be better equipped to promote healthful living at their church and in their community.

Risks: As you participate in this project, you will receive information that may cause discomfort as you review the harmful effect that various foods or lifestyle practices may have on the body. Use the information provided in this project as a guide as you move forward toward healthful living.

Voluntary Participation: I have been informed that my participation in this study is completely voluntary. I am aware that there will be no penalty or loss of benefits I'm entitled to if I decide to cancel my participation in this study. There will be no cost to me for participating in this study. I am aware that I may withdraw without giving a reason if I decide not to further participate in the study.

Confidentiality: I have been informed that the information I give will be stored securely and will not be available to anyone. In addition, my name will not be used on any of the surveys. I understand that my identity in this study will not be disclosed in any published document, and that researcher will keep the records and data in a secured electronic filing format. I also understand that I will

participate in focus group sessions, but my personal responses to surveys will be confidential.

Contact: I am aware that I can contact the supervisor of this project, _____ if I have questions about this study. In addition, I may contact the researcher, Glenn Cassinmy _____ for answers to questions related to this study. I can also contact the Institutional Review Board at Andrews University at (269) 471-6361 or irb@andrews.edu.

I have read the contents of this Consent and received verbal explanations to questions I had. My questions concerning this study have been answered satisfactorily. I hereby give my voluntary consent to participate in this study. I am fully aware that if I have any additional questions I can contact _____, or advisor.

Signature (Subject)

Date

Researcher Signature

Phone

Date

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VITA
GLENN CASSIMY

EDUCATION

- 2017 Doctor of Ministry, Andrews University, Berrien Springs, MI
- 1990 Master of Arts in School Administration, Michigan State University
East Lansing, MI
Type 75 Certification
- 1984 Master of Divinity, Andrews University, Berrien Springs, MI
- 1980 Bachelor of Arts in Elementary Education, Oakwood College
Huntsville, Alabama
Type 03 certification

PROFESSIONAL EXPERIENCE

- July 2014-June 2015 Principal Indiana Conference of SDA
Supervised the local school curriculum and building operations. Managed the development of the strategic plan. Provided daily classroom instruction.
- July 2011 to June 30 2014 Superintendent of Education: Lake Region Conference
Provided training on curriculum development and implementation for staff 2011-2014. Demonstrated how to prepare students improve scores on state, local, and standardized tests. Planned and managed the budget of the Lake Region Conference Education Department. Streamlined budget to cover costs for salaries, textbooks, staff travel, administrative travel, teacher conventions, and teacher workshops.

Supervised school administrators in preparing local school staff training initiatives, and teacher supervision activities. Directed educational delivery processes such as departmentalization, teaching multi-grades, and teaching through small groups.

Worked with eight local boards to select and hire qualified staff to teach students with a wide variety of needs. Assisted local school boards in planning school calendars, managing their local budgets, managing school facilities, preparing for school accreditation, and strategic planning.

May 2006-June 2011

Principal Northeastern Conference of SDA

Directed teacher institute and workshops initiatives.

Provided training at those institutes for teachers in Mathematics, Language Arts, Social Studies and Science curriculum delivery modes.

Provided teaching delivery pacing guides to direct teachers about successful ways to manage curriculum delivery for the school year. Trained selected staff development teachers to supervise the delivery of teacher workshops.

Sept 2001-May 2003

Assistant Principal, NY City Public Schools

Worked with school administrators on developing the framework for a new public school. Designed the teacher supervision plan. Managed student discipline issues.

Worked with central office staff to provide individual educational plans for students with special needs. Provided daily attendance data and student achievement data for central office personnel. Supervised student testing initiatives at building and district office levels.

Managed daily building operations including staff attendance, student discipline issues, and parental involvement. Assisted in developing and implementing the local school budget.

August 1995-June, 2001

Developed and implemented a magnet school and the curriculum.

Designed and implemented the science and technology curriculum for its students: grades three through eight. Developed and managed the local school budget. Provided staff development workshops to prepare teachers to successfully implement the adopted curriculum. Provided directions to assistant principals and building staff developers on working with teachers to successfully implement the curriculum.

Developed a teacher instructional management system to assist staff in monitoring student progress. Provided staff development workshops to district staff on developing successful plans and systems to monitor student needs and their academic progress.

CERTIFICATES

Administration: Lake Union Conference

Administration: New York State