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Agriculture, Food and Health

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A Note from the Editor

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THIS IS AN EXCITING ISSUE we have put together on a theme that is close to home for everyone, "Agriculture, Food, and Health." Thanks to all the contributing authors for sending in your research and reflections from a variety of perspectives. We started out inviting submissions exploring the role that food and agriculture play in health, wholeness, and *shalom* around the world, and we got more than that. A symposium on the topic of "Disease Is not God's Will," and a consultation on "Disease and Unreached Peoples," were organized on campus in the past few months, in partnership with the Ralph D. Winter Research Center and the Roberta Winter Institute. Since these produced research and discussions directly related to the theme, we have decided to include some of the papers and video presentations in this issue.

While all authors address issues relating to international development in one or more of the areas of agriculture, food, and health, each contributes from a unique perspective or emphasis. Their collective wisdom has no doubt added to our understanding of what international development means within the framework of the Kingdom of God.

WCIU president, Dr. Beth Snodderly, and Brian Lowther, Director of Roberta Winter Institute, co-author "Blessed Are the *Shalom* Makers: The Role of the Health Practitioner in the Church" in which they reflect biblically and theologically on the role of the church in the face of the cosmic opposition to God's Kingdom and how health professionals can be an integral part of demonstration of God's *shalom* on earth. At the Roberta Winter Institute Symposium recently, Becky Lewis, WCIU alumna, read her paper on "The Theology of Disease and Our Role in Its Eradication," in which she explored the topic from theological and historical perspectives as well as with research data from medical and health field.

In his paper on "Leaves from the Tree of Life," Daniel O"Neill, M.D., managing editor of the Christian Journal for Global Health, presents a framework for understanding "God's design to heal the nations and how His church can more effectively engage the nations in this new millennium." Arnold Gorsky's article on "The Church, Shalom, and the 'Slow Motion Disaster'" warns readers of the disastrous trend global healthcare is trekking on and appeals for participation of Christian medical professionals with the local churches in identifying the root problems and working toward the holistic health of the community. You may be interested to read how the Community Health Screening & Education approach may open venues for a "long-term, sustainable, culture-changing impact."

Based on studies that "dietary phytochemicals play a decisive role in breast and prostate carcinogenesis" and can obstruct "the initiation phase of carcinogenesis influencing their biological processes" or "act as suppressing agents by hindering the promotion and progression phases of carcinogenesis," Dr. Richard Gunasekera of the University of Houston-Victoria and his research team designed a "food pyramid" which provides information on choices of foods for cancer prevention.

WCIU Ph.D. student, Bishnu Regmi, proposes an "Agro-based Corporative Community as a Strategy for Poverty Reduction and Farmers' Empowerment," a contextual model based on his research and personal experience through working with a number of development agencies in Nepal, in which he deliberates on the five stages of development.

Dr. Ralph. D. Winter, founder of William Carey International University, wrote on the issue of poverty and Christian ministry in Guatemala in 1958 that still has much relevancy to us today. In face of the poverty-stricken Guatemala situation, he asked what could be thought and done differently. "Is there evidence of a downplaying of basic spiritual conversion efforts focused on individuals rather than 'social concern'? How different might the role of pastor be in this situation? How central to solutions (of poverty) might be the role of a pastor?" Winter asked, 50 years later, a few years before his death.

I wanted to thank the Roberta Winter Institute and the Ralph D. Winter Research Center for contributing to the issue, and recognize our media team, especially Kevin Renel, for making the video presentations from the symposium and consultation available online with this issue. As always, you are welcome to join the dialogue, discussion, and debate through commenting on the articles and blog postings, and sharing insights on your own social networks.

Agro-based Corporative Community as a Strategy for Poverty Reduction and Farmers' Empowerment

BISHNU REGMI

Bishnu Regmi is a doctoral student with William Carey International University who has served with a number of development agencies in Nepal.

"YOUR KINGDOM COME, YOUR WILL BE DONE, ON EARTH AS IT IS IN HEAVEN" (MATT. 6:10). The Lord's Prayer reflects the ultimate desire in God's heart for what the earth should look like. Isaiah presents a beautiful portrait of how our world will look when God's will is at last being done on earth:

> The wolf will live with the lamb, the leopard will lie down with the goat…and a little child will lead them. … They will neither harm nor destroy on all my holy mountain, for the earth will be filled with the knowledge of the Lord (Isa. 11:6, 9).

As we look around we see sickness, hunger, war, and brokenness in every corner of the earth. It is hard to convince ourselves that God wants to fix all these problems through the weak vessels of his people. But Isaiah describes the role God wants his people to play in pushing back against opposition to God's purposes:

> Is not this the kind of fasting I have chosen: to loose the chains of injustice and untie the cords of the yoke, to set the oppressed free and break every yoke? Is it not to share your food with the hungry and to provide the poor wanderer with shelter—when you see the naked, to clothe them, and not to turn away from your own flesh and blood? (Isa. 58: 6, 7).

But the reality in our world today is heart breaking. A large majority of the people in this world live on less than $10 a day (http://www.globalissues.org/article/26/poverty-facts-and-stats#src1). According to UNICEF, around 21,000 children die each day due to poverty (http://www.unicef.org/sowc/files/SOWC_2012-Main_Report_EN_21Dec2011.pdf). "The silent killers are poverty, hunger, easily preventable diseases and illnesses, and other related causes" (http://www.globalissues.org/article/715/today-21000-children-died-around-the-world).

Churches and NGOs are trying their best to address the problem, often at the individual level, with some exceptions. As we closely observe the mandate that God has given in Isaiah 58, we see that transformation must take place both at individual and structural levels. Verse six emphasizes the need for structural change, while verse seven seems more related to charitable efforts which can be done either individually or collectively.

> Is not this the kind of fasting I have chosen: **to loose the chains of injustice** and **untie the cords of the yoke**, **to set the oppressed free** and **break every yoke**? (Isa. 58: 6).
>
> Is it not to **share your food** with the hungry and to **provide the poor** wanderer with **shelter**—when you see the naked, to **clothe them**, and not to turn away from your own flesh and blood? (Isa. 58:7).

If we look at the sequence of the verse, initiatives for structural changes come first. In absence of initiatives for structural changes, charitable works usually do not help people in the long run. It rather creates dependency and reduces people's capacity to deal with their own problems. This is exactly what is happening around the world today. There are millions of charitable organizations working among the poor, but they have not achieved the expected results. For example, there are over 15 thousand non-profit organizations working in Nepal (http://www.visitnepal.com/nepal_information/ngo_in_nepal.php) but in 2013 the country still fell among the poorest 20 countries of the world, according to the International Monetary Fund World Economic Outlook Database (http://www.gfmag.com/global-data/economic-data/worlds-richest-and-poorest-countries). The research proposed in this

article aims to deal with a structural issue in rural communities of the developing world, particularly in Nepal, to help utilize God-given resources for the betterment of people living there.

When I was in the Philippines, I had the opportunity to travel in the countryside. I was amazed to see hundreds of acres of barren land and many abandoned houses in rural areas. There were very few people living in the villages. This is also happening in Nepal. I visited a village called Takasera in western Nepal, where most of people from 20 to 45 ages were out of village to work elsewhere. I think this is common in many developing countries.

On the other hand, the population of the major cities is increasing rapidly since people from rural areas are moving there to try to find a better life. Most of these poor people who come to metro cities live in squatter towns or urban poor communities. Although some of these people are able to afford to live in a better place, they live in squatter and urban poor communities due to various opportunities they have there through the government and NGOs. I met a family with five children living in one of urban poor communities in Metro Manila. All five children were receiving scholarships from NGOs. The father had a subsidized loan from an NGO for tricycle which was a main source of living for the family. The wife was running a sari-sari (convenience) store with a loan from the Micro Finance Organization where I was doing a case study.

About 25% of the population of metro Manilla, live in "informal settlements" or squatter areas, such as under bridges, according to a statement in 2011 by the Interior Secretary of the Philippines (http://www.interaksyon.com/article/4805/25-of-metro-residents-are-squatters---robredo). Today, about half of the world's population live in cities and this proportion continues to grow (http://kff.org/global-indicator/urban-population/).

> One hundred years ago, 2 out of every 10 people lived in an urban area. By 1990, less than 40% of the global population lived in a city, but as of 2010, more than half of all people live in an urban area. By 2030, 6 out of every 10 people will live in a city, and by 2050, this proportion will increase to 7 out of 10 people. (http://www.who.int/gho/urban_health/situation_trends/urban_population_growth_text/en/)

The economic development of a country relies on the optimum utilization of natural, human, and financial resources in the country. Urbanization, the demographic transition from rural to urban, is creating a shift from an agriculture-based economy to mass industry, technology, and service. There is a need for a special intervention that would help agricultural-based economy thrive to feed the people in the poorest countries of the world.

Agriculture is the major sector of Nepalese economy according to the Department of Agriculture. It provides employment opportunities to 66 percent of the total population (http://www.doanepal.gov.np/). Over 80% of the people in Nepal are dependant on agriculture, but most of these people own such a small piece of land that it is not sufficient for them to make an adequate living. The practices of traditional tools and techniques, non- improved seeds and soil, lack of advanced tools & technology, lack of access to market, and reliance on natural rain without modern irrigation, has resulted low productivity and low income (http://www.rrojasdatabank.info/wpover/sharma.pdf). This situation eventually causes people to give up on agriculture and migrate to urban areas to find jobs. The ABC community theory aims to address these issues.

The concept of Agro-Based Corporative (ABC) Communities is designed to address the needs of agricultural workers with small holdings. An ABC Community aims to develop an agricultural based corporation that is owned, run, and managed by small farmers, fisher folks, workers, and employees of the corporation itself. Therefore this approach is defined as a corporative community. This approach mainly has been adapted from the successful experience of the community forestry movement in Nepal. Ownership of forest land and natural resources is transferred to a local community to be used and protected by themselves. This approach for an agro-based corporative community assumes that each member of the community owns a piece of land that he/she is willing to donate to the corporation which is run and managed by the corporative community members.

Inevitably, it will take a long period of time for non-developed, non-structured, non-corporative agro-based communities to be transformed into corporative communities and the development will go through a number of stages. It is assumed that each stage requires at least two years.

Stage One—Cooperative: As an initial step, development intervention will be focused on providing improved seeds, tools, and training, awareness, and training in improved agricultural systems. Formation and institutionalization of a cooperative with improved access to agricultural inputs and markets will be initiated. An appropriate program will be designed in partnership with existing programs and resources from Government Organizations (GO), Non-governement

Organizations (NGO) and International Non-government Organizations (INGO) through conducting a broad base resource mapping. Local churches can play a vital role in forming and institutionalizing cooperatives.

Stage Two—Joint Farming: In this stage a joint farming or community farming system will be developed through acquiring advanced seeds, tools and equipment, irrigation facilities, and a resource center which will be for common use. Members are given reasonable prices for agricultural inputs and outputs that eventually help them increase their income. An ongoing education and awareness on agricultural, marketing, and livelihood are expected to be functioning well by the end of this stage.

Stage Three—Development of Leadership and Sectorial Cooperatives: In this phase numbers of specialized cooperatives will be developed under the main cooperative, i.e., education, health, agriculture, marketing, environment, women empowerment etc. Each sectorial cooperative will be strengthened, institutionalized, and linked with existing government programs or other related institutions. An ongoing educational program for each sector and leadership development will be functioning well in partnership with local churches, GO, NGO and INGO. A detailed resource mapping on each sector will be conducted. Local, regional, national, or even international resources will be tapped. Each sectorial cooperative will come up with their short/long term vision, goals, and programs. In this stage the joint farming system will have been institutionalized. A broad base of networking and partnership will exist.

Stage Four—Corporative Community: At the end of this stage the ABC Community is developed. This is the stage of seeing the dream come true. The main cooperative will be transformed to a Corporation. Each sectorial cooperative will be functioning as a separate department. Each member's property will be converted into company shares according to its market value and productivity. Members will be provided annual dividends according to their shares. Member families will be given priorities to work in the Corporation based on their education, capabilities, and skills. Existing programs from GO will be handed over to particular departments of the Corporation. A local governance department will be developed for good governance. Each department, including good governance, will have gender balanced leadership who are elected according to their qualifications, capabilities, and credibility. A socialized housing system would be developed in partnership with government and other housing programs. Each member will be provided housing according to his/her income and capabilities to repay on a long-term installment basis. The education curriculum and system will be developed based on needs of the Corporation for future expansion in partnership with the government's education department. Likewise different sectorial programs will be developed to improve horticulture, animal husbandry, herb farming, community forestry, irrigation, water systems, sports, health center, community resource center, bazaar, indusial area, etc. A broad base and long term networking with various stakeholders will be developed.

Stage Five—Expansion: Based on the success of ABC Community approach, the **program** will be expanded and replicated in other areas.

Believers can activity support work with this initiative for structural change, knowing that this is a means, at a global level, to "share your food with the hungry and to provide the poor wanderer with shelter—when you see the naked, to clothe them, and not to turn away from your own flesh and blood" (Isa. 58: 7).

The Theology of Disease and Our Role in Its Eradication

REBECCA LEWIS

Rebecca Lewis serves with an NGO in India researching community development and designing curriculum. She holds the MA in International Development from William Carey International University, where she taught as an adjunct professor for 10 years. This article was presented on October 10. 2014 at a Roberta Winter Institute symposium.

TODAY I WOULD LIKE TO DISCUSS THE THEOLOGY OF DISEASE. There are several ways this topic can be approached, and I do not intend to touch on all of them, but merely touch on two aspects: what we believe about God's design of nature in relationship to disease, and what we believe we should do about disease as a result.

All of the life forms on our planet appear to have amazing built-in mechanisms both for ongoing growth and for the replenishing of damaged or old cells. They also have mechanisms for correcting things that have gone wrong and, to some extent, for fighting off the invasion of destructive micro-organisms.

Significant progress has been made in the last decade in actually identifying the genes and enzymes (telomeres and telomerase) that keep a body's cells rejuvenating or cause them to age. In other words, it is no longer inconceivable scientifically that the body could indefinitely replenish and restore itself apart from being overcome by foreign invaders or toxic substances that disrupt this self-healing process. Some life forms even show the amazing ability to re-grow entire limbs if injured, so we know that DNA potentially also has this amazing capability.

The Bible says some unusual things that show the writers believed God had not designed life originally to lead inexorably to disease and death. For example, Genesis and Romans explain that death entered the world through Satanic intrusion and disobedience, and that mankind, indeed all of nature, is groaning and awaiting a day when it will be restored to a different disease-free and death-free reality, redeemed from the law of sin and death. So creation is longing to be set free from its slavery to corruption, and we likewise are awaiting not just spiritual but also physical redemption.

Therefore, it appears that disease and death were not a part of God's original creation nor his ultimate will, but entered the world at the point of Satan's dominance over our planet. In other words, it seems to me that death and disease are not presented in the Bible as part of God's design and plan, but as a consequence of sin and deviation from God's design, or perhaps more accurately, they are a WAR against God's design, a twisting and distortion of that design.

Nevertheless God does not become passive. At the time of the flood God seems to choose to restrict the life of mankind to 120 years for the expressed purpose of limiting the amount of evil they can perpetrate on the earth. But death is not presented as part of God's good design. The fossil data also seems to imply that there was a period also when many forms of life lived much longer, and some even grew to extremely large sizes. It is possible that whatever catastrophe occurred at the time of the flood diminished the potential longevity of all life forms.

So what is our role as God's people? The teachings of the Bible, even the specific laws of Leviticus, would suggest that we are to live in a way to promote the healthy functioning of our bodies and to destroy pathogens, for example mold, whenever they are discovered in inappropriate places. We are to proactively war against these rogue and destructive forces. Today we know much more about biological pathogens, as well as chemical and environmental toxins or nutritional deficiencies that can cause disease, and we have the capacity to discover even more. What should be our role as God's people in fighting for health today?

E. Stanley Jones, in his book *Christ and Human Suffering*, points out that all of mankind is struggling with the horror of suffering and death. Our spirits rebel against these things, and therefore come up with explanations. In India almost a billion people with a Hindu worldview have come to the conclusion that "whatever is, is just," namely that the suffering and death that we experience in this life is all "just" or well-deserved because we are merely reaping what we have sown by evil done in this or in prior lives. This belief in reincarnation and suffering-as-punishment makes them passive in the face of disease and suffering, because to alleviate suffering is to interfere with the process of justice.

Similarly Jones asserts that the Muslims of India believe "whatever is, is God's will," namely that God must have His good reasons for allowing or even sending these sufferings into our lives, reasons we may never understand but are also just. This perspective also equates suffering with punishment, whether for personal or corporate sin, and thus likewise produces passivity in response to human suffering.

Job's friends fell into this perspective, as have many Jews and Christians throughout history; however, this is not, E. Stanley Jones argues, the position of the Bible nor what we see in the life of Christ. He points out that the Bible shows us to be in a war against evil, both spiritual and physical, that God is not the author of evil but overcomes evil with good. God restrains his judgment or destruction of evil because of His mercy.

So Jesus explains that the men who were killed by the falling tower were not being punished for their evil deeds, otherwise we would all deserve such a fate. Similarly, the man born blind was not blind due to either his own sin or that of his parents. Instead God is glorified when Jesus heals his eyes. The picture painted is that the world is in the grip of a strangulating evil, and that suffering is as indiscriminate as the rain that falls on the just and unjust.

E. Stanley Jones shows that Jesus' own life demonstrated a determination to overcome the evil of sin, suffering and death, not merely by healing many but by, through his own suffering and death, breaking the power of Satan's rule on earth. Thereby, through his obedience reversing the disobedience of Adam and overcoming evil with good. He argues that followers of Christ must copy Christ.

Throughout history, the most dedicated followers of Jesus have followed his example. In his book, *The Rise of Christianity*, Rodney Stark demonstrates how faith in Jesus spread in part because the Christians were alleviating the suffering not only of their own sick but also caring for pagans during times of plague and famine. These early believers were pacifists, refusing to defend their own lives through violence, yet they were not at all passive toward disease and suffering, fighting against them with whatever means and knowledge they had. They understood through faith that we are in a battle against sin, disease and death, not merely waiting for some grand deliverance in the End of the Age.

Likewise, the vast majority of hospitals and curative medical innovations throughout history have been initiated by men and women impacted by the Bible. Florence Nightingale fought a long war against the ignorance that led to untold numbers of deaths in times of war. Once it was clear that germs were causing the infections killing thousands of wounded, why did it take a 20 year campaign by a committed Christian to make sterile nursing the standard in first war zones and later hospitals? And why were the doctors, Christian and otherwise, so reluctant to accept her challenge until she marshaled shocking statistics? I believe the reluctance came from a failed medical tradition that was slow to give way to new data and the need for new practice.

Throughout history, whenever causes of suffering have been clearly identified, believers have sought to come up with solutions that will proactively prevent or cure that suffering. Foundational to these sustained efforts is not only the theology that God expects us to fight against disease and suffering but also that God cares about each human life specifically and individually.

First John 3:8 says that the Devil has been sinning from the beginning but that Jesus came to destroy the works of the Devil. We are to do likewise. Whenever believers in Jesus begin to understand that a problem causing suffering is opposable, our faith demands that we fight it.

In the current era, I believe that the fundamental problem is not that we believers have the wrong theology or believe that we should be passive in the face of suffering, but that we have turned the job of finding out the causes of disease, and the solutions, over to professionals.

And when ignorance of causes of disease or suffering frustrate our attempts to restore health or prevent injury,

Christians can easily fall back into a more fatalistic outlook, cease to look for causes and solutions and accept even things like cancer, blindness, autism or Alzheimer's as somehow inevitable or even the will of God.

I believe that our modern professional medical paradigm took a wrong turn in the late 19th century with the genesis of the chemical industry. Most of what mainline medicine does today is not supporting the amazing curative health system of the body or seeking to restore the body to its original design. Instead, focusing on fast symptom relief, thousands of chemicals foreign to the body's natural functioning are being invented and used to block processes that have gone awry instead of restoring them to health. The causes of the malfunction have been left largely unexplored, while the resulting dysfunction is attacked aggressively with life-threatening operations and/or chemicals that unfortunately frequently act like bulls in the china shop, interfering with many other healthy mechanisms with predictable unhealthy side effects.

As our bodies fight back against this pharmaceutical chemical assault, more drugs are given to shut off our natural immune defenses so we will appear well when, in fact, we are even more susceptible to illness than before, and our bodies can be rapidly invaded by molds and other pathogens. The result is that even more toxic substances are introduced to kill of the pathogens, further weakening the body and poisoning organs charged with keeping the body clean like the liver and kidneys.

Sometimes, in the short run, these chemical assaults save a person's life, whether we speak of chemo drugs, or mycotoxins called antibiotics, or drugs that suppress high blood pressure, cholesterol formation or inflammatory responses. But virtually all of them have significant negative impact on the normal body functioning, which can lead to other long-term health problems or even death. Clearly, many painkillers have eliminated untold suffering while the body heals itself of injuries or fights disease, but most drugs are far less innocuous.

The end result is that many aging victims of this process are taking 20 or more separate medications by the time they die, half of them to suppress or mask the side effects of the other medications, with little respect or help for the built in health-restoring systems of the body. Some claim that fully a third of all deaths in the USA are now a result of drugs or drug interactions that prove fatal, not counting the ever increasing numbers of people committing suicide while on medications known to cause suicidal ideation.

Since there is more money in treating or "managing" prolonged chronic illness than in restoring the body to health, virtually no money is being invested by drug companies in discovering and eliminating the original source of everything from cancer to Alzheimer's to depression, allergies, asthma, diabetes and autism. While the National Institute of Health is trying to direct some of its funding in the direction of seeking the origin or cause of diseases, surprisingly little progress is being made.

Not only are we not discovering the causes of and curing or avoiding these diseases, they continue to claim more and more of our people with no family untouched. Some of these diseases did not even become common enough to be named until the mid-20th century, such as autism and Alzheimer's. We have become a nation of the chronically ill, with as many as 1 in 6 of our children having a chronic disease or syndrome by the time they enter school.

In his book, *The Anatomy of an Epidemic*, Robert Whitaker traces the epidemic of mental illness in America, especially among our teens and young adults. It seems that close to 30% of American college students are regularly taking some form of medication with psychotropic effects. Increasingly we consider it normal for people, even children, to be taking medication for chronic syndromes or diseases. This escalation of poor health should be shocking us instead.

What is even worse is that our failed medical paradigm is being aggressively marketed to the rest of the world both in terms of highly expensive healthcare that puts little into prevention, and in terms of mass produced drugs that provide symptom relief but not healing. At best, some drugs provide symptom relief without interfering too much with the body's self-healing capacity and a few aggressively attack pathogens without overly damaging the body. The book, *The Myth of the Chemical Cure*, by Joanne Moncrieff, explores only one small aspect of this great delusion---that associated with psychiatric medications. There are more and more books available on the subject of our failed medical paradigm as some doctors are coming to their senses.

God is dishonored by this purposeful disrespect of the body's design and willful ignorance of causes. Our ignorance is no longer justified because we now have the means to understand the original healthy functioning of the body and to

seek and alleviate the actual cause of the diseases instead of merely treating them.

One veterinarian and medical doctor, Joel Wallach, worked with Amish communities to discover why some of their communities had a high incidence of children born with muscular dystrophy while other communities did not, regardless of marriage connections. He was able to drastically reduce the number of children born with muscular dystrophy by finding that the soil of the diseased locations was depleted of selenium and recommending they supplement their diets with selenium, especially during pregnancy and early childhood. Unfortunately, his research has been ignored or actively suppressed even by the muscular dystrophy association. There are far too many similar examples. What if we were still only helping people with scurvy to die with less suffering instead of having discovered that Vitamin C can completely prevent the disease?

In conclusion, Dr. Ralph D. Winter, my father and the founder of the Roberta Winter Institute and the Institute for the Study of the Origins of Disease, knew what a powerful force in history followers in Christ can be when they are determined to eliminate suffering and what a powerful witness that is to the Love of God for the families of the earth. He wrote, in the beginning of his book *Frontiers in Mission*, "mission frontiers is a subject that is specifically concerned to explore and exposit areas and ideas and insights related to the glorification of God in all the nations (peoples) of the world, to open their eyes, to turn them from darkness to light and from the power of Satan to God (Acts 26:18)." He knew that if believers worked on discovering the origins of diseases, and releasing suffering people from these diseases, it would bring the knowledge of God's love to the peoples of the earth—overcoming evil with good.

We are not going to change the trillion dollar disease management industry, but we can wake up believers with a Biblical theology of fighting against disease and a renewed determination to take personal responsibility to discover and eliminate the causes of the diseases ravaging mankind today.

Phyto-Bioactive Food Pyramid©: A Healthy Dietary Plan for Preventing Certain Common Cancers

RICHARD GUNASEKERA WITH RESEARCH ASSOCIATES, JASIA BAIG, SIVA SOMASUNDARAM & CAROLYN OATES

Richard Gunasekera is Professor of Biology and Biochemistry at the University of Houston–Victoria and the Director of Graduate Programs—Biomedical/Biological/Forensic Sciences. He also serves as the Director of the online Perspectives Study Program and as Director of the Institute for the Study of the Origins of Disease.

Abstract

STUDIES HAVE SHOWN THAT DIETARY PHYTOCHEMICALS PLAY A DECISIVE ROLE in breast and prostate carcinogenesis by influencing their biological processes such as cell-cycle control, programmed cell death (apoptosis), inflammation, and DNA repair. Prostate and breast cancers are the most commonly diagnosed forms of cancers among both men and women in the United States and continue to be a major source of cancer-related mortalities around the world. Their pathogenesis includes the effects of environmental factors such as diet that may trigger the initiating of cancer in those who are predisposed genetically and epigenetically. Dietary phytochemicals can act as blocking agents by obstructing the initiation phase of carcinogenesis or they can act as suppressing agents by hindering the promotion and progression phases of carcinogenesis.

My team has designed a food pyramid based on phytochemical bioactive molecules (PBAM) that will provide consumers, survivors, and cancer patients with information on bioactive foods that contain PBAM for cancer prevention. Ranked via a hierarchy-based system, the pyramid will inform users about which healthy foods contain phytochemicals that have cancer/disease preventive properties. The pyramid is created electronically linking data mined from the scientific literature, epidemiological databases, and medical information on diet, nutrition, and cancer-preventive phytochemicals. It is structured to help an average consumer make an informed choice of foods, based on good nutrition, specific to their subjective needs. Consumers will be able to buy foods based on rankings ranging from most beneficial to least beneficial for cancer prevention. Each food is ranked via a point system based on an algorithm that includes the concentration of the phytochemical and the amount of PBAM it provides. This phytochemical pyramid will give consumers the assurance and confidence to choose foods from grocery stores and restaurants that will help fight cancer and certain other diseases. It will be particularly useful for people who are genetically prone to prostate and breast cancer.

Introduction

Prostate and breast cancer are the most prevalent cancers among men and women, respectively, particularly in the United States. Their pathogenesis includes multiple genetic and epigenetic mechanisms, including effects from environmental factors. The progression from a low-grade lesion to an aggressive adenocarcinoma takes several years. Therefore, both prostate and breast cancer typically have a very long latency period that provides a window of opportunity for intervention by cancer-preventive agents.

Accumulated scientific evidence suggests that certain cancers, particularly those that have hormonal origins such as prostate and breast cancer, are more likely to occur in people with unhealthy diets, low physical activity, and obesity (http://www.cdc.gov/HealthyYouth/). Also see these websites:

http://www.cancer.gov/cancertopics/factsheet/Risk/obesity; http://jn.nutrition.org/content/135/12/2934S.full; http://sehn.org/wp-content/uploads/2014/03/EcolOfBC_Chap8.pdf.

In fact, an increasingly large body of epidemiologic and medical literature demonstrates that as many as 30-40% of all cancer cases are related to unhealthy dietary habits (Donaldson 2004, 319). Increasing evidence substantiates the fact that a prudent diet has protective effects against various cancers. Dietary patterns with higher intake of sweets and fast foods have been associated with higher risk of colon, breast, prostate, and several other cancers (Thorogood et al. 1994, 1667-70). On the other hand, a healthy dietary pattern with higher intake of fruits and vegetables, which contributes to higher intake of dietary phytochemicals and increased levels of antioxidants, has been associated with lower risks of many cancers (Kushi et al. 2006, 254-81). These are important cues that link nutritional aspects with cancer.

Foods that are abundant in phytochemicals include various fruits and vegetables, including whole grains and green tea. Although the relationship between health and diet is complex, there are some dietary phytochemicals that seem to offer protection based on their specific bioactive configuration and their concentration levels. Several molecular targets and biochemical signaling pathways that are affected by phytochemicals have been discovered. These targets could be certain DNA sequences, enzymes and their cofactors, and transcription factors such as the nuclear factor kappa B. Studies have shown that dietary phytochemicals play an influential role in breast and prostate carcinogenesis by influencing biological processes such as cell-cycle control, programmed cell death (apoptosis), inflammation, and DNA repair.

Inflammation is closely linked to tumor promotion. During chronic inflammation, the tissues experience an increase in biochemical markers of inflammation, resulting in a state of oxidative stress. Overproduction of oxidants or oxidative stress causes damage to DNA and other cellular proteins, resulting in increased risk for cancer. Antioxidants and anti-inflammatory phytochemicals help inhibit or reduce the oxidative damage induced by free radicals.

In this study, we organized healthy foods that contain phytochemicals that have been shown to provide chemo-protection. This protection includes inducing apoptosis (self-destruction) of cancerous cells and inhibiting the growth of cancer cells. Several other cancer preventing/protection criteria are also taken into consideration based on their molecular and cellular mechanisms. Using a computer program, we have ranked each food via a hierarchy-based point system ranging from most beneficial to least beneficial for cancer prevention. We have found eight cancer preventive properties of 49 dietary phytochemicals that play a crucial role by affecting fundamental cellular processes involved in carcinogenesis.

From this data, we have designed an interactive Phyto-Bioactive Pyramid© (PBP) useful to consumers for selecting bioactive foods. The addition to a daily diet of fruits and vegetables containing these 49 phytochemicals that have cancer/disease preventive properties can play a vital role in increasing the body's natural defense mechanism and thus lower the risk of many cancers. Our study demonstrates that each of these healthy foods in the Phyto-Bioactive Pyramid will be particularly useful for people who are genetically prone to certain cancers such as prostate and breast cancer, and it provides a useful tool for human nutrition.

Materials and Methods

Data Analysis: Cancer-preventive Properties of Phytochemical Bioactive Molecule (PBAM)

Phytochemicals are natural chemicals found in plants. Studies suggest that there are more than 4,000 phytochemicals that have been identified (http://www.breastcancer.org/tips/nutrition/reduce_risk/foods/phytochem). Research indicates that dietary phytochemical bioactive molecules (PBAM) induce numerous cancer preventing/protection mechanisms by directly or indirectly influencing several cellular and biological processes involved in carcinogenesis.

To identify phytochemicals bioactive molecules (PBAM) active in the protection and prevention of cancer, we isolated bioactive compounds containing 8 cancer-preventive properties and were able to identify 49 cancer-preventive phytochemical bioactive molecules (PBAM): 1) Allyl methyl trisulfide. 2) Caffeic acid. 3) Capsaicin. 4) Carnosol. 5) Chlorogenic acid. 6) Coumarin. 7) Curcumin. 8) Diallyl sulfide. 9) Ellagic acid. 10) Ferulic acid. 11) Gallic acid. 12) Limonene. 13) Perillyl alcohol. 14) Phytosterols. 15) Salicylic acid. 16) Secoisolariciresinol. 17) Ursolic acid. 18) (-)-Epigallocatechin gallate (EGCG). 19) Ajoene. 20) Allicin. 21) Alliin. 22) alpha-

Carotene. 23) Alpha-Tocopherol. 24) Apigenin. 25) Beta Sitosterol. 26) Beta-Carotene. 27) Cyanidin. 28) Delphinidin. 29) Epicatechin. 30) Genistein. 31) Gingerol. 32) Hesperidin. 33) Indole-3-carbinol. 34) Lutein. 35) Lycopene. 36) Naringenin. 37) Nobiletin. 38) Pectin. 39) Phytic acid. 40) Quercetin. 41) Resveratrol. 42) Rutin. 43) Saponins. 44) Selenium. 45) Sinigrin. 46) sulforaphane. 47) Theaflavin. 48) Vicenin-2. 49) Zeaxanthin.

Dietary Sources

Increasingly, data from the scientific literature and medical journals on diet, nutrition, and cancer-preventive phytochemicals, supports the role of an unhealthy diet in the formation and progression of both breast and prostate cancer. Although the link between diet and health is extremely complex, research indicates that consumption of fruits and vegetables with cancer-preventive phytochemicals plays a crucial role in lowering risks of many cancers. To identify dietary sources beneficial for prostate and breast cancer protection and prevention, we used a computer program based on an algorithm to isolate the foods containing the eight cancer-preventive properties in 49 dietary phytochemical bioactive molecules (PBAM). We restricted our research to foods containing cancer-preventive phytochemicals that are particularly useful in lowering risks of both prostate and breast cancer.

Table 1: *List of foods with cancer-preventive properties beneficial in both prostate and breast cancer protection:*

Almond	Brussel Sprouts	Flax	Parsley	Sage
Aloe	Cabbage	Garlic	Parsnips	Southern Pea
Angelica	Cantaloupe	Ginger	Pea	Soybeans
Anise	Caraway	Ginseng	Peach	Spearmint
Apple	Carrot	Grape	Peanut	Spinach
Applemint	Cashew	Grapefruit	Pear	Strawberry
Apricot	Cayenne	Green Bean	Pecan	Sweet Potato
Artichoke	Celery	Guava	Pepper	Tabasco
Asparagus	Chives	Horse Chestnut	Peppermint	Tangerine
Avocado	Cilantro	Japanese Mint	Pineapple	Tarragon
Banana	Cinnamon	Kiwi	Pistachio	Tea
Barley	Coconut	Lemon	Plum	Thyme
Basil	Coffee	Lettuce	Pomegranate	Tomato
Bell Pepper	Corn	Licorice	Potato	Turmeric
Bitter Melon	Cornelian Cherry	Mango	Pumpkin	Watermelon
Black Caraway	Cranberry	Oats	Purple Cauliflower	Wheat
Black Cherry	Cucumber	Okra	Radish	White Mallow
Black Walnut	Date Palm	Onions	Raspberry	
Blackberry	Dill	Orange	Rosemary	
Blueberry	EggPlant	Oregano	Rutabaga	
Broccoli	European Chestnut	Papaya	Saffron	

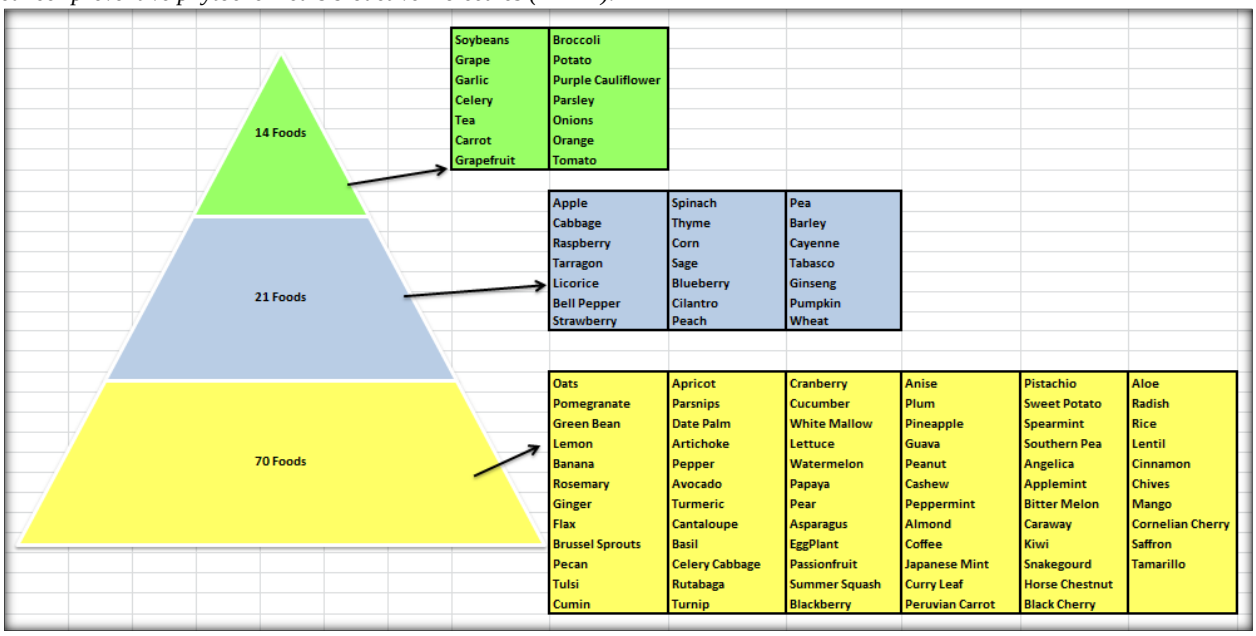
Table 2: *Summary of list of foods with cancer-preventive properties showing the relationship between each fruit or vegetable and its effect on breast (B) and prostate (P) cancer protection. Foods with cancer-protective properties beneficial in both prostate and breast cancer protection are indicated by the shaded color in this chart.*

Food	Protection		Food	Protection		Food	Protection		Food	Protection		Food	Protection	
Almond	B	P	Cantaloupe	B	P	Garbanzo		P	Passionfruit		P	Southern Pea	B	P
Aloe	B	P	Caraway	B	P	Garlic	B	P	Pea	B	P	Soybeans	B	P
Angelica	B	P	Carrot	B	P	Ginger	B	P	Peach	B	P	Spearmint	B	P
Anise	B	P	Cashew	B	P	Ginseng	B	P	Peanut	B	P	Spinach	B	P
Apple	B	P	Cayenne	B	P	Grape	B	P	Pear	B	P	Strawberry	B	P
Applemint	B	P	Celery	B	P	Grapefruit	B	P	Pecan	B	P	Summer Squash		P
Apricot	B	P	Celery Cabbage		P	Green Bean	B	P	Pepper	B	P	Sweet Potato	B	P
Artichoke	B	P	Chives	B	P	Guava	B	P	Peppermint	B	P	Tabasco	B	P
Asparagus	B	P	Cilantro	B	P	Horse Chestnut	B	P	Peruvian Carrot		P	Tamarillo		P
Avocado	B	P	Cinnamon	B	P	Japanese Mint	B	P	Pineapple	B	P	Tangerine	B	P
Banana	B	P	Coconut	B	P	Kiwi	B	P	Pistachio	B	P	Tarragon	B	P
Barley	B	P	Coffee	B	P	Lemon	B	P	Plum	B	P	Tea	B	P
Basil	B	P	Corn	B	P	Lentil		P	Pomegranate	B	P	Thyme	B	P
Bell Pepper	B	P	Cornelian Cherry	B	P	Lettuce	B	P	Potato	B	P	Tomato	B	P
Benneseed		P	Cranberry	B	P	Licorice	B	P	Pumpkin	B	P	Tulsi		P
Bitter Melon	B	P	Cucumber	B	P	Mango	B	P	Purple Cauliflower	B	P	Turmeric	B	P
Black Caraway	B	P	Cumin		P	Oats	B	P	Radish	B	P	Turnip		P
Black Cherry	B	P	Curry Leaf		P	Okra	B	P	Raspberry	B	P	Watermelon	B	P
Black Walnut	B	P	Date Palm	B	P	Onions	B	P	Rice		P	Wheat	B	P
Blackberry	B	P	Dill	B	P	Orange	B	P	Rosemary	B	P	White Mallow	B	P
Blueberry	B	P	EggPlant	B	P	Oregano	B	P	Rutabaga	B	P			
Broccoli	B	P	English Walnut		P	Papaya	B	P	Saffron	B	P			
Brussel Sprouts	B	P	European Chestnut	B	P	Parsley	B	P	Sage	B	P			
Cabbage	B	P	Flax	B	P	Parsnips	B	P	Snakegourd		P			

Results

Phyto-Bioactive Pyramid© (PBP) for Prostate Cancer

Figure 1*: Phyto-Bioactive Pyramid © (PBP) for prostate cancer. Distribution according to color and hierarchy is as follows: Green, most beneficial level; Blue, moderate beneficial level; Yellow, lowest beneficial level. Foods with cancer-preventive properties specifically beneficial in protection and prevention of prostate cancer are evaluated based on their statistical value generated through a computer program point system based on their final concentration, the total benefits from phytochemicals, and the total numbers of cancer preventive phytochemicals bioactive molecules (PBAM).*



Phyto-Bioactive Pyramid© (PBP) for Breast Cancer

Figure 2: *Phyto-Bioactive Pyramid © (PBP) for breast cancer. Distribution according to color and hierarchy is as follows: Green, most beneficial level; Blue, moderate beneficial level; Yellow, lowest beneficial level. Foods with cancer-preventive properties specifically beneficial in protection and prevention of breast cancer are evaluated based on their statistical value generated through a computer program point system based on their final concentration, the total benefits from phytochemicals, and the total numbers of cancer preventive phytochemicals bioactive molecules (PBAM).*

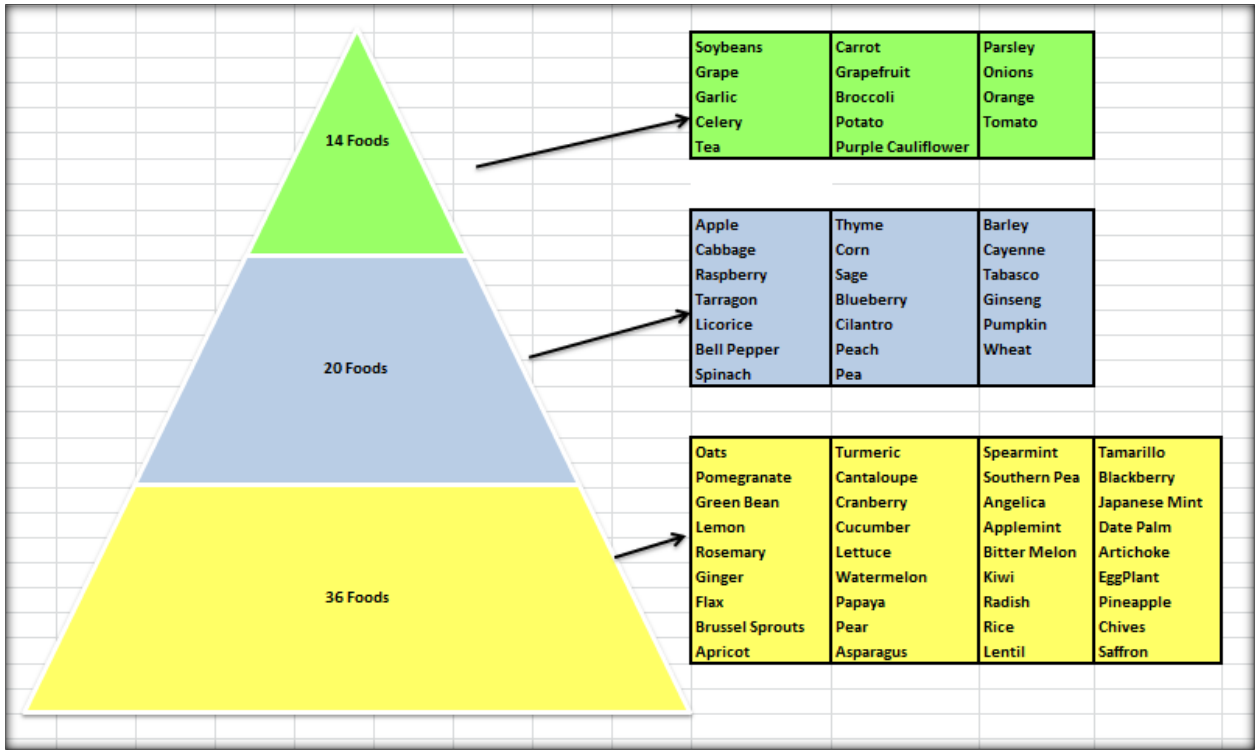


Table 3: *Summary list of foods with cancer-preventive properties showing the relationship between the fruit or vegetable and its effect on prostate (P) and breast (B) cancer prevention or protection. Foods with cancer-preventive properties specifically beneficial in protection and prevention of prostate and breast cancer are evaluated based on their numerous preventing/protecting cellular and biological mechanisms. We restricted the foods containing cancer-preventive phytochemicals in this pyramid to those with both protective and preventive properties. Those with preventative and protective properties for both breast and prostate cancers are indicated by the dark shaded color in this chart.*

Food	Prevention		Protection		Food	Prevention		Protection		Food	Prevention		Protection		Food	Prevention		Protection		Food	Prevention		Protection	
		P	B	P		B	P	B	P		B	P	B	P		B	P	B	P		B	P	B	P
Almond		P	B	P	Cantaloupe	B	P	B	P	Ginseng	B	P	B	P	Peach	B	P	B	P	Soybeans	B	P	B	P
Aloe		P	B	P	Caraway		P	B	P	Grape	B	P	B	P	Peanut		P	B	P	Spearmint	B	P	B	P
Angelica	B	P	B	P	Carrot	B	P	B	P	Grapefruit	B	P	B	P	Pear	B	P	B	P	Spinach	B	P	B	P
Anise		P	B	P	Cashew		P	B	P	Green Bean	B	P	B	P	Pecan		P	B	P	Strawberry		P	B	P
Apple	B	P	B	P	Cayenne	B	P	B	P	Guava		P	B	P	Pepper		P	B	P	Sweet Potato		P	B	P
Applemint	B	P	B	P	Celery	B	P	B	P	Horse Chestnut		P	B	P	Peppermint		P	B	P	Tabasco	B	P	B	P
Apricot	B	P	B	P	Chives	B	P	B	P	Japanese Mint	B	P	B	P	Pineapple	B	P	B	P	Tamarillo	B	P		P
Artichoke	B	P	B	P	Cilantro	B	P	B	P	Kiwi	B	P	B	P	Pistachio		P	B	P	Tarragon	B	P	B	P
Asparagus	B	P	B	P	Cinnamon		P	B	P	Lemon	B	P	B	P	Plum		P	B	P	Tea	B	P	B	P
Avocado		P	B	P	Coconut	B		B	P	Lentil	B	P		P	Pomegranate	B	P	B	P	Thyme	B	P	B	P
Banana		P	B	P	Coffee		P	B	P	Lettuce	B	P	B	P	Potato	B	P	B	P	Tomato	B	P	B	P
Barley	B	P	B	P	Corn	B	P	B	P	Licorice	B	P	B	P	Pumpkin	B	P	B	P	Turmeric	B	P	B	P
Basil		P	B	P	Cornelian Cherry		P	B	P	Mango		P	B	P	Purple Cauliflower	B	P	B	P	Watermelon	B	P	B	P
Bell Pepper	B	P	B	P	Cranberry	B	P	B	P	Oats	B	P	B	P	Radish	B	P	B	P	Wheat	B	P	B	P
Bitter Melon	B	P	B	P	Cucumber	B	P	B	P	Onions	B	P	B	P	Raspberry	B	P	B	P	White Mallow		P	B	P
Black Cherry		P	B	P	Date Palm	B	P	B	P	Orange	B	P	B	P	Rice	B	P		P					
Blackberry	B	P	B	P	Dill	B		B	P	Oregano		P	B	P	Rosemary	B	P	B	P					
Blueberry	B	P	B	P	EggPlant	B	P	B	P	Papaya	B	P	B	P	Rutabaga		P	B	P					
Broccoli	B	P	B	P	Flax	B	P	B	P	Parsley	B	P	B	P	Saffron	B	P	B	P					
Brussel Sprouts	B	P	B	P	Garlic	B	P	B	P	Parsnips		P	B	P	Sage	B	P	B	P					
Cabbage	B	P	B	P	Ginger	B	P	B	P	Pea	B	P	B	P	Southern Pea	B	P	B	P					

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Blessed Are the *Shalom* Makers: The Role of the Health Practitioner in the Church

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SOMETHING IS WRONG IN THIS WORLD. "Nature, red in tooth and claw," is a pattern acted out at all levels of life, from micropredators (diseases caused by microbes) to macropredators (social diseases caused by humans, such as war and human trafficking). Intelligent evil is at work, distorting God's original good purposes. Creation itself is groaning, even at the microbial level, waiting to be delivered by the free choices of the body of Christ, through whom God has chosen to work in this world (Rom. 8:18, 19).

Harmful microbiological life, such as bacteria, viruses, and parasites, may represent one of the best examples of a lack of *shalom* between humans and creation. If we could find a way to establish good relationships between humans and microbiological life, how many diseases would simply vanish? God's intention at the end of history is to restore *shalom* relationships throughout creation. God's creatures "will neither harm nor destroy on all my holy mountain" (Isa. 54:25). God intends to "wipe away every tear" (Rev. 21:4) caused by imperfect relationships. Working toward *shalom* relationships is the mission of God and this is our mission as well. Until God ushers in that final perfect new heaven and new earth, Christ's followers serve as God's display window (Stetzer 2012, 189), showing what God's kingdom is meant to look like.

Ralph D. Winter found a lack of awareness in the Church of what God's kingdom should look like. He was particularly concerned about the distortions of God's will in the realm of disease. Winter asked, "What would Jesus have said about fighting germs in the name of Christ had the people of his time known about germs?" (Winter 2008f, 168).

Our universe is engulfed in a cosmic war. In this war, an adversary is battling against God's will for God's people and creation. The famous hymn, "A Mighty Fortress Is Our God," shows Martin Luther's awareness of this "ancient foe." "Satan is his name, i.e. an adversary. … He is the prince and god of this world" (Luther 1999, 37:17). In a discussion of Luther's understanding of Satan's works, Walter Lundberg includes the adversary's tactic of seeking to subdue the world to his will through "teaching us to acquiesce to his terrible divinity by attacking our health and well being" (Sundberg 2008, 29).

In his book, *Walking with the Poor*, Myers highlighted the role of this adversary:

> I do not want to move past the issue of an adversary too quickly. Someone other than human beings created the temptation that resulted in the fall. Too often we dismiss the idea of a form of personal evil that actively works against God and God's intentions for human beings and creation. Yet, without Satan's role in the first part of the biblical story, there would be no need for the rest of the biblical story. We cannot read Satan out of the story and have it make any sense (Myers 1999, 28).

The enemy we face is God's enemy and disease is one of the enemy's tools. What is the role of health practitioners, then, to those in harm's way in this war-torn world? Suppose a local church was located near a street where an unseen sniper was shooting at people each night. What would be the

responsibility of that local church to those in harm's way? Primary prevention would mean telling people to stay away from that street at night. But some people would not get the message and inevitably each night some would be injured or killed. Caring health practitioners from the church might be willing to risk their lives to bind up the wounds and help the wounded get well. No doubt those health practitioners would take secondary prevention measures such as wearing helmets and flak vests to protect themselves from the sniper's bullets. But would the local church settle for warnings and bandages and flak vests? Or would they take on the responsibility of getting to the root of the problem by finding and stopping the actions of the sniper—tertiary prevention?

People are being wounded physically, psychologically, and spiritually by activities instigated by the adversary, the devil, the sniper, that "ancient foe" that seeks "to work us woe." In this cosmic battle with the prince of darkness, health care workers need affirmation and support from the body of Christ so they do not grow "weary in doing good" (Gal. 6:9). In this chapter we would like to challenge pastors to recognize the crucial role that health practitioners can have in the ministry of the local church. We are calling for the local church to encourage health practitioners to found and join *shalom*-minded groups focused on the frontiers of God's kingdom. As health workers go where people do not expect to see God at work, taking Jesus into the world (Stetzer 2012, 6), they are doing the work of the Church, giving the world a "foretaste of the restoration of creation to its true harmony … and of man to his true relation to the created world" (Newbigin 1954, 67).

The Role of the Church within God's Kingdom: Signs of *Shalom*

"I am the vine, you are the branches. … without me you can do nothing" (John 15:5).

The Church: Followers of Jesus

The first characteristic of the Church is that its members are followers of Jesus. This was Jesus' legacy—a community of followers (Newbigin 1989, 133). Throughout his ministry, Jesus prepared his followers to continue his work, and to do even greater things (John 14:12), through the Holy Spirit whom Jesus promised to leave to encourage and empower his followers (Acts 1:8). Neil Cole, author of "Organic Church" in the *Perspectives on the World Christian Movement Reader*, says he has come to view the Church as "the presence of Jesus among His people" who are called to join God's work in this world. The core reality of the Church, for Cole, is "Jesus Christ being followed, loved and obeyed" (Cole 2009, 644-45).

In the Book of Acts we can see numerous examples of how the early believers followed and loved and demonstrated the works of Jesus:

Acts 4:32-37: believers share their possessions so there are no needy people among them.

Acts 5:12-16: the Apostles heal many sick and those tormented by evil spirits.

Acts 6:1-6: seven brothers are chosen to care for the physical needs of the widows.

Acts 8:4: the disciples are scattered and preach the word wherever they go.

Acts 8:5-8: Philip does miraculous signs: evil spirits come out of many, cripples are healed.

Acts 9:7-19: Ananias prays for Saul's eyesight to be restored.

Acts 9:36: Dorcas "was always doing good and helping the poor."

Acts 9:37-42: Dorcas is raised from the dead.

Acts 10 and throughout the rest of the book: followers of Jesus preach the good news.

Rather than a continued emphasis on the physical miracles performed by the apostles, the Epistles show a frequent emphasis on general good works that are characteristic of all followers of Jesus. The author of 1 John gives a concrete example that is representative of the numerous uses of the term, "works" (of Jesus and his followers) in the various epistles of the New Testament: "If anyone has material possessions and sees his brother in need but has no pity on him, how can the love of God be in him? Dear children, let us not love with words or tongue *but with actions [works] and in truth*" (1 John 3:18, emphasis added).

The Church: Jesus Incarnate, The Body of Christ

The important thing to note about the works done by Jesus and his followers is that these works are done through God,

through the Holy Spirit, and that these are always directed toward what is true and good, and toward correcting, or overcoming, what is not true to God's will (such as sickness, lack of food and clothing, or destructive behavior).

These descriptions of Jesus' followers show that the Church really is Jesus incarnate, "an embodiment of the risen Jesus." "No wonder," Neil Cole exclaims, "the Bible refers to the church as the Body of Christ" [1 Cor. 12; Rom. 12] (Cole, 2009, 645). The Apostle Paul urged the Ephesians "to live a life worthy of the calling you have received" (Eph. 4:1) because "Christ himself gave the apostles, the prophets, the evangelists, the pastors and teachers, to equip his people for works of service, so that the body of Christ may be built up" (Eph. 4:11, 12). In Romans 12 we see the importance of a variety of gifts of service within the body of Christ. Some of these gifts of service are within the sphere of health care workers, as Jesus demonstrated in Matthew 4:23 as he announced the coming of the kingdom and healed "every disease and sickness among the people."

The Church: A Living Sign of the Reign of God

When the body of Christ follows Jesus in visible demonstrations of God's Kingdom, the Church stands out, Christ's life shines through it, and God receives glory (Matt. 5:16). Newbigin described cross-cultural ministry as "an acted out doxology. That is its deepest secret. Its purpose is that God may be glorified" (Newbigin 1989, 127). The Church does not exist for itself, but instead is "a sign of the kingdom in the midst of a given culture" (Van Engen 1991, 116).

Signs of the Kingdom

Health as a Sign of the Kingdom

One important sign of the Kingdom is good health, the right relationship of the human body within itself and with the environment, including the microbial world. Whenever these relationships are not as God intended, members of the body of Christ have work to do, to attempt to restore those relationships, to bring glory to God by showing a sign or preview of what God's Kingdom will be like in the age to come.

Health is an integral aspect of God's *shalom*. In the Greek version of the Old Testament, the Septuagint, one of terms used to translate the Hebrew, *shalom,* is "*hugiainei*/good health." When the patriarch Jacob was met by the servants of his uncle Laban, whom he had not seen for many years, Jacob asked, "Is he well/*shalom*/*hugiainei*?" (Gen. 29:6). Later in life Jacob sent his son Joseph to check on the welfare/*shalom*/*hugiainei* of the other brothers (Gen. 37:14, *Net Bible*). In 2 Samuel 20:9, Joab asks, "Are you in health/*shalom*/*hugiainei,* my brother?" (Brenton 1986).

In his ministry Jesus, the Prince of *Shalom*, demonstrated that health and wellness are an integral part of God's will. The first glimpse we get of Jesus' ministry in Matthew's Gospel shows Jesus "healing every disease and sickness among the people" in demonstration of the good news of the kingdom (Matt. 4:23). When John the Baptist sent his disciples to ask Jesus if he was the "one who is to come," Jesus' answer was all about the Kingdom signs of good health he was restoring to those around him: "Go tell John what you hear and see: The blind see, the lame walk, lepers are cleansed, the deaf hear, the dead are raised, and the poor have good news proclaimed to them" (Matt. 11: 4, 5). In general Jesus amazed the people following him "when they saw the mute speaking, the crippled made well, the lame walking and the blind seeing. And they praised the God of Israel" (Matt. 15:31). When Jesus said, "Blessed are the peacemakers" (Matt. 5:9), he was describing the role believers are to have as children of God, taking over the family business of bringing signs of *shalom* to this broken, diseased, war-torn world.

Health practitioners can feel encouraged and assured that their work brings praise and glory to God as they follow Jesus' example in helping to restore people to a closer approximation of God's will for people to enjoy good health.

Challenging the Powers of Darkness as a Sign of the Kingdom

But if it is God's will for people to enjoy good health, the adversary opposes this. While we will not see all people healed, all diseases eradicated, this side of Christ's second coming, God's people have the responsibility to keep on demonstrating signs of God's reign, pointing to Jesus' work, to God's true character. This is hard work and it draws the sniper fire of the adversary.

> When the Church … goes the way the Master went, unmasking and challenging the powers of darkness and bearing in its own life the cost of their onslaught, then there are given to the Church signs of the kingdom, powers of healing and blessing which, to eyes of faith, are recognizable as true signs that Jesus reigns (Newbigin 1989, 108).

In the earlier illustration, the invisible sniper represents the adversary who seeks to "steal, kill, and destroy" (John 10: 10) the *shalom* and good health that God intends for humans and all creation. Perhaps we can think of the Church as God's beachhead in a war-torn world. In wartime, a beachhead is very serious business. It is a small piece of ground taken as the first step toward taking all the ground that the enemy holds. In our illustration, the local church and its members serve this beachhead function by providing a safe haven, a taste of *shalom,* in the midst of danger. The hypothetical members of that local church risked their lives to attempt to overcome evil with good, challenging the powers of darkness as a sign of the Kingdom.

Why Did Jesus Heal?

If Jesus' earthly ministry focused so much on healing and defeating the powers of darkness, what does that tell us about the role of the body of believers he left on earth to continue his work? A fictional story from the Roberta Winter Institute blog illustrates several views about Jesus' healing ministry, many of which do not recognize the role of the adversary in what is wrong on this earth:

One day four prominent evangelicals met for breakfast with a secular journalist. The journalist was writing a story about faith and disease. She posed this question: "Why did Jesus heal? After all, healing people doesn't get them into heaven. But Christ sure used up a lot of his time healing. Why?"

The first evangelical said, "Jesus healed because he was compassionate. Like at the end of Mark 1, where the man with leprosy says, 'If you are willing, you can make me clean.' And Jesus is filled with compassion and heals him. Jesus loved the people and didn't want to see them suffer. It's as simple as that."

The second evangelical said, "I'm not going to argue that Jesus didn't care about people. But that wasn't the ultimate reason. Jesus healed people as a means to attract a crowd, to get a following. After they got healed they would hang around and listen to his teaching and that's how he built the church."

The third evangelical said, "I can see your point. But I think the ultimate reason that Jesus healed was to bring glory to God. As in John 9:2 where the disciples ask Jesus, 'Who sinned, this man or his parents, that he was born blind?' Jesus replies, 'Neither, but that the works of God should be made manifest in him.'"

The fourth evangelical said, "Well, I suppose there is truth in all of these answers. But I'm uncomfortable saying that healing is merely a tool for the cause of evangelism. I personally think everything Jesus did was an act of war against Satan. As in 1 John 3:8, 'The son of God appeared for this purpose to destroy the works of the devil.' When he healed people of a sickness, he was doing battle with Satan. Throughout scripture, and throughout history, disease is one of the main ways Satan affects humanity. Yes, Jesus healed people because he was compassionate, and in a sense he healed to empower his evangelism, his 'recruiting efforts,' if you will. And, yes, he healed to glorify his Father. But it is also about the cosmic war against God's adversary. (http://www.robertawinterinstitute.org/blog/2012/3/30/why-did-jesus-heal.html)

Nature and Reality of the Cosmic Opposition to God's Kingdom

While the enemy's works can be summarized as bringing death—both physical (disease and deformity, social and mental chaos) and spiritual (unbelief, hatred), the Son of God appeared to give life (1 John 4:9). The coming of the Son of God resulted in works and characteristics that are the opposite of those associated with the death-dealing works of the devil, thus nullifying or destroying them (1 John 3:8).

The adversary is hostile to life and to God's will for humans and creation to flourish. A comparison of maps of high incidences of disease and child mortality with the areas of the world where the gospel has had the least influence (Myers 1996) shows that where the Bible has had the least influence, there is the most suffering, disease, war, and poverty. This is not a coincidence. An adversary is a work, instigating and

taking advantage of unjust social structures, ignorance, greed, disease, and more. A Christian medical worker to India from 1939–1969 wrote in his journal, "this kingdom of disease, death, ignorance, prejudice, fear, malnutrition and abject poverty is most surely a kingdom which ought to be overthrown by the Kingdom of our God" (Rees 2003). "Overcome evil with good," the apostle Paul urges the body of Christ in Romans 12:20.

The Church Joins God in the Battle

"The reason the Son of God appeared was to destroy [nullify] the devil's work" (1 John 3:8). As Christ's followers, we are to push back the darkness by demonstrating signs of God's will for human flourishing. God's desire is to rescue humans and all creation from the kingdom of darkness, including the social and physical results of intelligent evil, such as disease. "The one who wishes to love and serve the Lord will want to be where he is. And where he is is on that frontier which runs between the kingdom of God and the usurped power of the evil one" (Newbigin 1989, 127). What should be our response to being rescued from the dominion of darkness and brought into the kingdom of light (Col. 1:12, 13)?

Two Men's Responses

A pastor and a missiologist have each responded by calling the body of Christ and the local congregation to join God in the battle for *shalom*, including fighting disease.

Gregory Boyd has said, "To follow Jesus is to do battle with the ever-present prince of darkness" (Boyd 1997, 280). In a recent sermon Boyd urged his congregation to:

> Fight the evil effects of nature. We are doing spiritual warfare when we fight disease. This is more than just prayer. Anything we do to push back the harmful effects of nature is a step toward reclaiming nature, toward rebuking the curse. … When scientists … investigate new ways to sanitize water, they are doing spiritual warfare. When they discover ways to fight diseases and discover their origins, that is spiritual warfare. Anything we do to fight poverty and hunger is spiritual warfare. … Anything we do to reflect God's ideal for creation is a form of spiritual warfare. By these and other means we are fighting back against the curse of death that is not God's will (Boyd 2010, 292-93).

Ralph D. Winter urged,

> As Abraham's children, we have inherited the family responsibility of God's concerns and purposes which are to become our concerns and purposes. It is not to seek high pay or perks, but the war that must be [fought]! Our lives and careers need to yield to that reality (Snodderly 2006, 35).

Some will rightly point out that humans do not win the war—that is what God will do. But Winter was challenging believers to recognize that they are participants in the cosmic battle. While Jesus struck the decisive blow on the cross, His followers are still "mopping up" in very real battles with the adversary. Late in his life Winter began to realize that the battle was not just for peoples' souls and a home in heaven. Even if the message of the gospel were readily available to every people group on earth, people would still get sick. People would still get heart disease or malaria or cancer. He came to believe that one of the largest impediments to demonstrating the nature of God's kingdom, God's character, and God's will for human flourishing, was the factor of rampant sickness and disease. For example, "If four out of five members of the family are sick," he would say, "then the family is in poverty." Winter saw that the incredible violence we must fight against in the name of Christ constitutes an all-out war. Neither laity nor clergy are well aware of that war. Thus, all true believers, not just "fulltime workers," must be willing to organize against evil, to be creative, and to measure every vocation not by its pay scale, but by its contribution to that war. Winter wrote, "It seems very clear that we must recruit people for this war as well as for heaven. If we can't do both we will ultimately fail at both" (Winter 2008e, 325).

Winter founded the Roberta Winter Institute in 2001, at the time of his first wife's death from cancer, to raise the Church's awareness of the need for a new theological sensitivity to destroying the works of the devil, including disease. While medical researchers often use terminology such as "the battle against cancer," or they speak about the immune system as being "at war within" (Clark 1995), the evangelical Church

needs to recognize those battles as something diabolically designed, that requires a response from Christ's followers, in Jesus' name. Theologically the Church needs to recognize that salvation is about more than just the next life. "When souls are saved they are not merely supposed to be survivors singing of their salvation, but soldiers deliberately choosing to enter into the dangerous, sacrificial, arduous task of restoring the glory of God for all to see" (Winter 2008, 168). "The least we can do," he wrote, "is set something in motion that may rectify our understanding of a God who is not the author of the destructive violence in nature and who has long sought our help in bringing His kingdom and His will on earth. We are in a war against an intelligent enemy" (Winter with Snodderly 2009, 44, 48).

Result of the Battle

As a means of engaging in this war believers are to demonstrate God's will and character, and as a result, God's character will be better known among the peoples of the earth and many will be attracted to follow that kind of God. The enemy is defeated and some part of his work is nullified when believers intentionally join God in overcoming evil with good. They may do this through healing the sick in Jesus' name. Or believers may restore *shalom* relationships by discovering the origins of an infectious disease and working toward its elimination. Inevitably there will be casualties in this war with the adversary. Psychologists, nurses, and other health workers can bring *shalom* to the dying, as they reflect God's lovingkindness and mercy, pointing them at the end of their battle in this life to the perfect Kingdom. When Jesus' followers demonstrate God's character in these ways, and as broken relationships are healed, a measure of *shalom* is restored and God receives the credit and glory.

The Local Congregation: God's Instrument to Demonstrate Shalom

As a sign of the breaking in of God's Kingdom, overcoming darkness, fighting back against the death-dealing works of the devil, what is the role of the local congregation? How can pastors equip and encourage God's people for works of service in the sphere of right relationships that result in good health (3 John 2)? How can pastors and fellow church members show that they value and deeply respect the importance of the contribution to the body of Christ of health care workers?

Corrective to Introverted Concerns

Lesslie Newbegin called for local congregations to "renounce an introverted concern for their own life, and recognize that they exist for the sake of those who are not members" (Newbigin 1989, 233). Charles Van Engen echoes this by saying, "local churches cannot be ends in themselves" (Van Engen 1991, 111). Ed Stetzer admonishes, "We are far too pleased with the comforts of the church rather than the work of God's kingdom" (Stetzer 2012, 48). It is the age of country-club Christianity, where funds are used to please and entertain those who pay their dues (tithes) and to compete with the other religious country clubs for new members by offering nicer amenities such as attractive facilities and special programs. The question becomes, if your church were gone tomorrow, who outside of the members would be affected? If a country club disappeared, only its members would care. But the local congregation is to be an intentional outpost of God's Kingdom, a witness and example in its location.

This witness is about more than talking to people about their spiritual needs. In the Lord's Prayer, Jesus taught his followers to pray for physical needs (daily bread) to be met before spiritual needs could be recognized and met (forgive us as we forgive others). Ideally, in a holistic approach to meeting spiritual needs, "a church's relationships and ministries offer participants and visitors a foretaste of the redemption and reconciliation that is God's full salvation" (Branson and Martinez 2011, 39). Ed Stetzer urges the church to see itself as "the instrument God uses to lead others into his kingdom through our proclamation and demonstration of his saving, transforming gospel" (Stetzer 2012, 205). Health practitioners have a vital role in offering the local and global community a glimpse of what Jesus meant by his first request in the Lord's Prayer: for God's will to be done on earth, as it is in heaven.

Transforming Societies

Nigerian-born pastor of a mega church in the Ukraine, Sunday Adelaja, is passionate about the role of the local church in transforming society:

> The church fulfills its mandate when it changes society, not when it's confined to its sanctuary and Sunday school classrooms… The Kingdom must overflow into streets and workplaces, governments and entertainment venues. That is its nature, to grow and take over. If you try to keep it to yourself, you lose it (Adelaja 2008, 7).

An example of local churches overflowing in demonstrations of God's will for people to live in right relationship with God, enjoying good health and healthy relationships, is Saddleback church's AIDS initiative in Rwanda. There, local pastors are empowering members of their congregations to receive training for giving information about prevention, primary care, and treatment for those suffering in the AIDS pandemic. Recently the Rwandan leader of this initiative was invited to speak to the international AIDS conference, for the first time giving that group of health care professionals a glimpse of how the body of Christ, at the local congregational level, is able to better deliver primary health care and prevention than the professionals in their clinics. Every village has a church of some kind, and a pastor the people can trust with their stories. People are far less likely to trust, or have access to, a doctor in a distant town, for receiving medication, vital information, and follow-up care.

In this case study, a large local western church is partnering with many local churches in another country to demonstrate signs of *shalom*, bringing signs of the Kingdom to a whole society that "lies under the power of the evil one" (1 John 5:19). Saddleback's AIDS and Orphans coordinator, Elizabeth Skyffe, explained that 100% of children die by the age of five whose mothers and grandmothers have HIV/AIDS or have already died from AIDS themselves (communication to author). In such a situation, how can the church say, "be warmed and fed," without also offering the health care services so desperately needed?

God's Agents of Encouragement

From Ephesians 4 we know the role of pastors is to equip the body of Christ for works of service. In light of the challenge for the local congregation to be a transformational agent in society, how can pastors mobilize and equip health care workers for the glory of God? We have seen that demonstrations of God's will include both prevention and healing of what is contrary to God's will in the sphere of personal and societal health. Why then do health professionals often feel that their work is not valued by the local church?

Jeffrey Havenner, a retired microbiologist who worked at the Walter Reed Army Institute of Research in the Department of Rickettsial Diseases, described the loneliness and need for encouragement experienced by researchers in the health industry, in an interview with the director of the Roberta Winter Institute. Dr. Havenner responded to a question about how health workers integrate their work with their faith:

> Scientists are under intense pressure to compartmentalize faith in God, if they have it, and keep it out of scientific practice on pain of exile from the profession if they do not. The integration of our faith in God with our work so that God is honored by what we do and by how we interact with people we work with is of great importance. It is easy for people to feel defeated in their walk with God because they feel compromised in the way they are forced to separate work from faith to avoid trouble especially in government settings (interview with author).

Disease researchers are not alone in their need for encouragement and support in their attempts to glorify God in the health professions. The son of a psychologist working in a mental health institution reported the pressure and frustration his father faced to release patients early. Rather than treating patients as long as necessary to restore their ability to function in society, he was expected to sign off on the "miraculous recovery after 5 months and 28 days" of mental health patients, just before their 6 months of insurance coverage would expire (interview with authors).

In addition to pressures to conform to unjust structures, nurses and doctors must deal with death, dying, and disabilities on a daily basis. Caregivers facing an overload of feelings of helplessness and hopelessness may choose to abandon their caring profession, or they may build defense systems of callousness, or some may become depressed and broken themselves. Pastors and members of local congregations can help fill the need for encouragement and support among health

professionals, but in addition, mutual encouragement and networking is needed.

Conclusion: A Challenge to Organize Health-Focused Groups

If the desire of God is to restore right relationships, then health professionals—psychologists, nurses, doctors, public health workers, medical researchers—are vital to the Church which is God's agent in this world. These workers are bridging the gap between the "already" and the "not yet" Kingdom. They are demonstrating God's loving character to the wounded, sick, and dying, the victims of the adversary's sniping attacks.

Accordingly, we urge the local church to encourage health practitioners to found and join *shalom*-minded groups focused on the frontiers of God's kingdom where *shalom* is notably absent.

Some of these groups may specialize in public health, nursing, research, or psychology. In one church we know of, several medical doctors in the congregation founded a "cosmic conflict lab," in which a variety of health professionals meet weekly to hear lectures by invited guests. Other groups may focus on mutual encouragement, others on practical projects. For example, Ralph Winter dreamt of establishing an Institute for the Study of the Origins of Disease.

Essentially we're asking pastors to encourage members of their congregations who have—or can obtain—expertise as medical practitioners, cultural anthropologists, managers, community organizers, educators, social scientists, linguists, fund raisers, government liaisons, chemists, microbiologists, epidemiologists and those in many other fields, to join and help sustain a vibrant, powerful movement of believers who will work together for the glory of God to establish *shalom* wherever it is absent.

When Jesus' followers participate in the *missio Dei*, God can get the credit and the glory as people recognize God's character through the actions of God's people. As Richard Stearns, President of World Vision, said about believers joining God together to combat massive world problems like disease in his book, *The Hole in Our Gospel*,

> [It] would be on the lips of every citizen in the world and in the pages of every newspaper—in a good way. The world would see the whole gospel—the good news of the kingdom of God— not just spoken but demonstrated, by people whose faith is not devoid of deeds but defined by love and backed up with action. His kingdom come, His will be done, on earth, as it is in heaven. This was the whole gospel that Jesus proclaimed in Luke 4, and if we would embrace it, it would literally change everything (Stearns 2009, 219).

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Poverty and the Christian Ministry

RALPH D. WINTER

Ralph Winter was the founder of William Carey International University. This article was originally written while he was serving in Guatemala in 1958. Fifty years later, one year before his death in 2009, he added questions for discussion in light of the state of the contemporary world.

ONE'S FIRST REACTION on arriving to live among people desperately poor is to try to do something helpful. Here in the highlands of Guatemala you see Indians picking up individual grains of corn from the gutters. They sell their few eggs because they get more calories in the monetary equivalent of a grain.

At 5 a.m. little 6-year-old children are out on the roads stumbling along behind their parents, carrying astonishingly heavy loads. They walk 20 miles to be able to plant another few square feet of corn. Desperate arguments arise over inches of land. Christian families, increasing due to the presence of medical help and the absence of money for birth control materials, present children that are inevitable vagrants and who cannot marry for lack of land inheritance. When Pedro, a Presbyterian elder's son, wanted to marry Tona, the daughter of a leading deacon, her father said no. Pedro has 19 living brothers and sisters—thus he inherits little land.

In Guatemala and in Latin America in general, things are not as well ordered and understood as they are in the U. S. where a pastor rarely needs to worry about his people finding jobs. In the States only the refugee family comes up for such consideration. Even then, many community resources are already available. But here in Guatemala a perfectly vast scramble and shuffle is taking place as the result of the "catching on and catching up" that is the disorder of the decade. We North Americans come here like men from Mars, so to speak; from a culture that is several stages in growth beyond the largely agrarian, self-subsistent economy that still characterizes 80% of the Guatemalans (most of whom are patient Indians working away in ways that are completely outmoded).

If simple hard work could solve their problems there would be no problem. But the road ahead is not straight. It has vicious curves they may go off. They've never had enough money thus far to find out what liquor can do for them. Their sacrificial efforts in learning a new trade—like say tailoring—may tomorrow be undercut by the arrival of low-priced machine-made garments from the Capital.

The sensitive Christian conscience is hit and hurt by these things. Furthermore it is not merely that the Indians are poor, especially so the Christians in many cases, but because it is in the nature of the Christian faith to "lift the heavy burdens" (Isa. 58:6) and to share medical progress and modern wonders. Science, as the wonderland of God's handiwork, belongs as much to God's Guatemalan Indian as to God's Californian.

But to obtain outside food donations doesn't really solve the problem. Nor money for food. In our valley of 20,000 Indians a million dollars given outright would supply food for only a few months—and then what? Nor can these Indians grow a whole lot more corn in the amount of land they have; and population growth can easily outstrip that. Land enough there is, on the uninhabitable and disease-ridden tropical coast. Here in the cool, beautiful highlands is where most of the people live.

Nor can the cross-cultural worker readily enter into high-level economic planning. The government offices are buzzing with studies and plans, and with hundreds of U. S. advisors. And with all that help, Government efforts themselves are often shortsighted. Relocating people on the coastal land is merely postponing the evil day when there will come in flood tide the inevitable shift from hand agriculture-of-the masses to mechanized agriculture of a few— and the secondary result of large-scale technological unemployment. (Who should know this better than those in the U. S.?)

But in any case it is a fact that even if Christians didn't need food, church buildings and pastors' salaries still take money; and a Christian community that is getting the rug

pulled out from under it is in no great shape to pour funds into outreach.

On the personal level we can advise young men that there is no future in custom-made clothes (all clothes in rural areas still tend to be made by hand in little one-sewing-machine shops). This advice is negatively good. Can we be positively helpful and bring training in skills-with-a future? Do we really need to bother about these problems at all?

As a rule the johnny-come-lately ministry in Guatemala (e. g. Pentecostal, Southern Baptist, Mormon) are all strictly gospel preaching and no nonsense about economic problems. They obviously haven't faced nor stopped to think about the physical conditions of their future constituencies. But the older NGOs that have raised up thousands of believers over more than half a century are faced with the problems of success: do we help the already-Christians in all their problems of development and outreach, individual and church finance? Do we help them to relate to the world as it is today? Or do we let Radio Cuba be the only voice discussing their practical problems?

It may be that the New England Puritans can give us a lead here. They faced desperate economic problems, and their preachers came equipped with a theology that made every task a holy calling. To Rev. John Cotton, "A Christian would no sooner have his sin pardoned than his life established in a warrantable calling." To them, getting productively established in (this) God's world was vitally important as a spiritual task! Vocational rehabilitation—as secular as that phrase now sounds—was part of their theology of redemption.
Every cross-cultural worker worth his salt, no matter what his agency, bases his work 100% on the assumption that there is nothing really possible in human development except it be built on a transformed inner spirit. Even secular experts, Peace Corps people, or whoever it is at work with human clay, must sense at last that when the inner spirit of man is damaged, dampened, or degraded, there is precious little hope for economic schemes and programs.

The biblical, "I will put a new spirit within you" (Ezek. 11:19) is the only sure foundation you can build on. This is why all ministers everywhere can take heart. Their work is bedrock. No industrial process is more miraculous than the transformation of the heart and life of man. This phenomenon is taking place daily and progressively in the lives of those who have already surrendered their all to Christ. The secular mind looks the other way, belittles and ignores this kind of work. It is too intangible, unscientific. Yet it is to the glory of the U. S. protestant Christian NGOs that as the result of their work there are now in the countries of the non-Western world something like 60,000,000 (sixty million) followers of Christ (and immeasurable indirect influences), who constitute in their countries the highest quality sub-community. They are the alert, bright-eyed, honest people who set the standards for morality and hope. This is an immense but "invisible" movement you can never read about in the papers. It isn't the sudden or tragic thing papers feed on.

Yet, believe it or not, there it was in the paper a few days ago—in the leading Guatemalan daily, in letters one half inch high—"Young Protestant wanted," an ad offering a fabulous salary at least four times as high as the average pastor here gets. The North American company running this striking want-ad apparently believes you can build on a transformed life. I asked the owner of a big factory in the capital city why he advertised for evangelical workers. Without pausing a split second he shot back, "They don't booze, chase the women, and they come to work."

It is well and good that we fear the sentimental idealism involved in "social gospel" efforts to build economic progress on untransformed people asking no questions about the sickness of the inner man. But it is probably a mistake to transfer that kind of fear to those who are genuinely transformed. This fear perpetuates itself by stowing away in the memory many examples of how "even Christians in these countries can't be trusted with money," etc. It doesn't quite jive, of course, with our confident reports of how many have been soundly converted! It is true that a converted Indian doesn't handle money as effectively as he has learned over the centuries to save and manage corn. But with such a man you at least have something sound to build on. Shall we teach him everything except how to handle money?

One answer may be to work through a somewhat new kind of pastor, teach him the broad outlines of what the modern world consists of, and among other things how his people will have to adjust like mad to meet radically changing circumstances, and that his people desperately need, along with bedrock faith and love, the elements of broad orientation and technical training that will prepare them in creativity, resourcefulness, and durability-with-flexibility to land on their feet like a cat in the rough and tumble ahead.

Perhaps these new pastors can both learn and catch up-to-date trades and businesses. The most sturdy and reliable

elements in the population are the available raw materials. In the poorest Indian areas both the culture and the economics of the situation may demand that the pastor be self-supporting in part, as were Presbyterian ministers to a great extent a few decades ago in the States. Best of all, occupied in some portable job like weaving, as was the Apostle Paul, and for the same reasons. It's interesting to speculate what kind of book the New Testament would have been had no one ever taught Paul a trade. Then too, the communistic air Latin America is breathing these days as much as states that the pastor who does no concrete work is a social parasite. Paul worked with his hands in part possibly to set an example for his people to follow: "With toil and labor we worked night and day … to give you an example to imitate" (2 Thess. 3:8, 9). Is this out of date or up to date? What is up to date?

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Questions for Discussion 50-years later:

1. How many evidences do you see in this document which clearly indicate that it was written a long time ago?

2. What evidences do you see of an awareness even back then of the phenomenon of "Globalization"?

3. What do you feel is the most radical difference between the Guatemalan situation described and the situation of a U. S. congregation? How easily is this difference understood by U. S. donors?

4. Why, according to this document, is the giving of food not an adequate answer?

5. What is the most crucial blind-spot of government-to-government aid, and even international businesses?

6. What example(s) do you find of the relative futility of "local" business activity?

7. Is there evidence of a downplaying of basic spiritual conversion efforts focused on individuals rather than "social concern"?

8. What according to this document is a fundamental contribution of a pastor?

9. How different might the role of pastor be in this situation? How central to solutions (of poverty) might be the role of a pastor?

The Church, *Shalom*, and the "Slow Motion Disaster"

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The Quest for *Shalom*

> Health, which is a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity, is a fundamental human right (World Health Organization 1978).

THE BIBLICALLY BASED CONCEPTS OF *SHALOM* AND "COMPLETE" HEALTH and wellbeing have had a strong, but seldom recognized, influence on the World Health Organization (WHO). In fact, current WHO and U.S. standards and guidelines on primary care and development are based on the work of our Christian cross-cultural mentors and faith-based organizations in the 1960s and 1970s.[1]

For example, the WHO 2008 World Health Report is devoted entirely to primary care and emphasizes the need to return to the Declaration of Alma Ata principles of 1978 (World Health Organization 2008b). Those principles, the foundation of WHO's collaborative, integrated, holistic[2] approach to health, were co-authored by Dr. Carl Taylor, a member of the Christian Medical Commission and long-term cross-cultural worker to India (Taylor, Bryant, and Swezy 2008; World Health Organization 2008a, 5).

Although the Christian Medical Commission is credited with originating the term "primary care," their definition was far more comprehensive than that used today, and is better described as "transformational development" (Bryant 1969; Bryant and Richmond 2008; Taylor-Ide and Taylor 2002; Taylor 2008; Myers 2011; Corbett and Fikkert 2009; Schwartz 2007; Fountain 1990; Cueto 2004; Litsios 2004).

The validity of these Christian principles and practices of transformational development continue to be confirmed and promoted by the WHO. For example, the Christian Medical Commission emphasized (and numerous WHO and U.S. Department of Health and Human Services reports have confirmed) that our healthcare system's efforts alone are unable to provide adequate care for even the "disease or infirmity" part of the quest, in spite of overwhelming increasing costs. Our quest for *shalom* must be collaborative. It requires a multisectoral approach involving all of society including government, education, and the food, tobacco, alcohol, drug and advertising industries (World Health Organization 2008b; Peters and Elster 2002; Meena Seshamani 2009; Lawn et al. 2008).

But *most* of all it requires that the Church re-establish its central role in this collaborative effort. This is not at all a new concept. It has long been the goal of the very same cross-cultural workers responsible for the WHO's current holistic approach to healthcare and transformational development (Lambourne 1963; McGilvray 1981; Fountain 1989).

Why is this so critically important for our current global healthcare crisis, a crisis so serious that the WHO has labeled it the "slow motion disaster"? What are the root causes of this crisis and how can the work of our Christian cross-cultural mentors assist the Church in resolving them? What is Community (or Church-based) Health Screening and Education (CHS&E), and how does it implement the principles of the Christian Medical Commission? And how can CHS&E and similar faith-based approaches help congregations reassume their biblical responsibilities for health, healing and wholeness (the quest for *shalom*)?

Although this article focuses on the CHS&E approach to health, healing and wholeness, it is important to recognize that this is not an "emerging new model." It is based on the aforementioned work of the Christian Medical Commission

and WHO that has been in existence for over forty years. The problem is that their biblical, evidence-based,[3] holistic approach has not yet been implemented by most churches or healthcare systems, in spite of overwhelming evidence of need. In this article we will therefore review:

1. Beliefs/Values and the Behavior-Induced Epidemic of Preventable Disease ("The Slow Motion Disaster")
2. "The Slow Motion Disaster" and the Need for the Church
3. A Simple Approach to Church-based Healing: Community (or Church-based) Health Screening & Education (CHS&E)
4. CHS&E and The Great Commission: An Evidence-based, Christ-centered Alternative to the Short-term Cross-cultural Ministry Drug-based Approach
5. CHS&E and "The Slow Motion Disaster": Why is Evidence-based, Participatory Health Education so Critically Important?
6. The Church and *Shalom*, or the "Slow Motion Disaster"?

1. Beliefs/Values and the Behavior Induced Epidemic of Preventable Disease ("The Slow Motion Disaster")

"When Christ commissioned his disciples to heal, He was not addressing the graduating class of a healing profession. He was laying an obligation on all who would follow Him," explained Dr. James C. McGilvray, the first director of the Christian Medical Commission (McGilvray 1981).

Until the last 50 to 75 years, the Church had always been the primary provider of health and healing, even at the most expensive hospital level of care (Lambourne 1963; McGilvray 1981; Fountain 1989; Gorske 2012; Wikipedia 2012). In the absence of the Church, the changes in our beliefs/values and lifestyles, and the adverse effects on our nation's health have been nothing less than catastrophic.

For example, the U.S. Department of Health and Human Services reports that the majority of U.S. adults (over 68%) are now overweight or obese. "Normal" is not normal anymore. Both national and international evidence-based guidelines document unequivocally the early disability and death due to the numerous weight-related non-communicable diseases. These include heart disease, stroke, high blood pressure, type 2 diabetes, breathing problems, gallstones, osteoarthritis, certain cancers and numerous other preventable conditions (U.S. Department of Health and Human Services 2010).

"A shorter life expectancy than their parents"

Even worse, about one in three U.S. children and teens is now overweight or obese, nearly triple the rate of 1963. In testimony before the U.S. Senate, Surgeon General Richard Carmona, reported:

> Today pediatricians are diagnosing an increasing number of children with Type 2 diabetes—which used to be known as adult-onset diabetes. Research indicates that *one-third* of all children born in 2000 will develop Type 2 diabetes during their lifetime. Tragically, people with Type 2 diabetes are at increased risk of developing heart disease, stroke, kidney disease, and blindness. ... Because of the increasing rates of obesity, unhealthy eating habits, and physical inactivity, *we may see the first generation that will be less healthy and have a shorter life expectancy than their parents*" (Carmona 2004).

The WHO and the worldwide "slow motion disaster"

But it is not only the U.S. that is in serious trouble. Adoption of our western beliefs/values and behaviors has resulted in a worldwide "slow-motion disaster." Weight-related diseases have now increased to epidemic levels resulting in a major healthcare crisis for developing, as well as developed countries. For example, *The Lancet* reported that nearly 10% of adults world-wide now have diabetes (Danaei et al. 2011), and the prevalence of this devastating disease is rising rapidly.

As reported by the Director General of the WHO,

> The worldwide increase of non-communicable diseases is a slow-motion disaster, as most of these diseases develop over time. But unhealthy lifestyles that fuel these diseases are spreading with a stunning speed and sweep. The root causes of these diseases are not being addressed, and widespread obesity is the tell-tale signal. … Just as you cannot hide obesity, you cannot hide the huge costs of these diseases to economies and societies (Chan 2011).

"Beyond the coping capacity of even the wealthiest countries in the world"

The harmful effects of our change from a holistic church-based approach to the commercialized for-profit drug-based approach to healthcare continue to cause worldwide alarm. The global epidemic of diseases simply due to the changes in our beliefs/values and behaviors of unhealthy diet, inadequate

exercise, smoking and misuse of alcohol recently resulted in the second ever United Nations General Assembly on Health in its 67-year history.

And, as reported by the United Nations, this behavior-induced epidemic "... *constitutes one of the major challenges for development in the twenty-first century, which undermines social and economic development throughout the world and threatens the achievement of internationally agreed development goals*" (United Nations 2011).

In spite of the trillions per year we have invested in our commercialized approach to U.S. healthcare, the Director General of the WHO reports, "*In the absence of urgent action, the rising financial and economic costs of these diseases will reach levels that are beyond the coping capacity of even the wealthiest countries in the world*" (Chan 2011).

2. "The Slow Motion Disaster" and the Need for the Church

Although the diseases may be somewhat different, the international healthcare crisis faced by the Christian Medical Commission forty years ago and the healthcare crisis now facing our country and the world-wide Church are fundamentally the same: the overwhelming costs and failure of hospitals and curative care to provide adequate healthcare to their patient populations (McGilvray 1981; Paterson 1998).

But just as forty years ago, it is *not* hospitals and curative care that are most important for the health of our patients and resolving the healthcare crisis. And it is definitely not an excuse for the Church to abandon its healthcare responsibilities to its community. For just as forty years ago, what is most important is keeping our patients out of hospitals in the first place (Chan 2008; World Health Organization 2008b, a; Peters and Elster 2002).

Christian physician mentors and members of the Christian Medical Commission have long emphasized the need for the church to reassume its central role in healthcare. There is a critical need for qualified healthcare professionals as well. There is much we doctors, nurses, and other healthcare providers can accomplish when we provide evidence-based health promotion and prevention (integrating community health into primary care) in accordance with Christian Medical Commission initiated WHO and U.S. healthcare guidelines. Doctors and other healthcare professionals must serve as their church's co-workers in initiating this Christ-centered, church-based, collaborative quest (Fountain 1989; Lambourne 1963; McGilvray 1981).

But as also emphasized by the United Nations, WHO, and U.S. Department of Health and Human Services, the root cause of this impending worldwide health, economic, and development disaster is *not* medical and it cannot be resolved by doctors and nurses. We must work with the Church. For this is a lifestyle problem, a problem of beliefs and values. It is a spiritual problem, and it will not be resolved until the Church reassumes its responsibilities for the holistic health of its community.

A few larger church organizations have already begun to implement programs that incorporate a number of the Christian Medical Commission principles with excellent results (Adventists in Step for Life n.d.; Saddleback Church 2012). But the need is for every congregation to reassume its responsibilities and to incorporate as many of the Christian Medical Commission biblically based principles as possible. How can this be accomplished, especially if the congregation is small, has few resources and is already struggling financially, particularly on the field?

3. A Simple Approach to Church-based Healing: Community (or Church-based) Health Screening & Education (CHS&E)

Community Health Screening & Education (CHS&E) is based on the above biblical and evidence-based principles and guidelines, and is one way to accomplish this goal (HEPFDC 2011). It was developed to assist the Church and its communities, both urban and rural, in the U.S. as well as developing countries, in their collaborative efforts to resolve their most important healthcare problems (save the most lives and prevent the most suffering).

The complete (22-page) CHS&E guidelines, as well as evidence-based lessons, are available free for downloading through the Health Education Program For Developing Countries (HEPFDC) "Heath Screening" page and need not be duplicated here.[4] It is also not necessary for congregations to use these CHS&E materials. It is, however, essential to address the urgent, critical need for every congregation to reassume its responsibly for the health of its community. Each congregation and its healthcare providers must be convinced. Yet care must also be taken to ensure these efforts are in accordance with the

Christian Medical Commission's biblical and evidence-based guidelines.

For example, most patients we see in both the U.S. and developing countries are suffering from diseases that are preventable. The World Health Report 2008 emphasizes the following as one of the most important problems in both developed and developing countries: "Misdirected care. Resource allocation clusters around curative services at great cost, neglecting the potential of primary prevention and health promotion to prevent up to 70% of the disease burden" (World Health Organization 2008b, xiv).

CHS&E's evidence-based approach also enables the integration of Personal / Primary Care and Public / Community Health, at all three WHO "Health Pyramid" levels of care: 1) Hospital, 2) Clinic/Health Center, and 3) Church / Family / Community. This Christian Medical Commission concept is essential to the success of healthcare systems in both developed and developing countries. As reported in the special edition of *The Lancet,* "Alma Ata-30 Years On" Sept. 2008,

> The missing link in the translation of the principles of Alma-Ata from idealism to practical, effective strategies has been the failure to integrate the perspective of personal and public health. The future of health care generally, and primary care specifically, depends on the *integration of personal health care and public health at the level of the local community* (van Weel, De Maeseneer, and Roberts 2008, 871ff; Gorske 2009b).

Lack of implementation of these biblical and evidence-based holistic guidelines has resulted in the worldwide "slow-motion disaster" described above. It is also directly responsible for the WHO Director's alarming report: "In the absence of urgent action, the rising financial and economic costs of these diseases will reach levels that are beyond the coping capacity of even the wealthiest countries in the world" (Chan 2011). Yet it is not a lack of resources that is the problem. For example, all of the materials and guidelines referenced in this article are available free for downloading. So although the healthcare problems addressed remain the leading causes of premature death and unnecessary suffering in nearly every community in every country, churches and their communities already have access to the evidence-based resources to begin to resolve those problems (HEPFDC 2011).

But most importantly, CHS&E enables the local church, regardless of size or resources, to reassume its responsibilities for the provision of biblically based, holistic (body, mind, spirit) health and healing for its members and its community—the quest for *shalom*.

CHS&E is founded on the best scientifically valid work of the Christian Medical Commission and our cross-cultural mentors. Yet it is also important to emphasize that CHS&E is, in itself, only a way for the Church to reestablish its vocation, and is not at all what is most important in the quest for *shalom*. For the Church, with its foundation of love, belief, prayer, the Word, sacraments, and Christian fellowship *was created* for healing (McGilvray 1981).

Thus the Church already has in place what is *most* important for the quest. CHS&E simply demonstrates, from an evidence-based scientific standpoint, how even in our modern, high tech medical world, the Church can, and must, reassume its responsibilities for the health of its community.

4. CHS&E and The Great Commission: An Evidence-based, Christ-centered Alternative to the Short-term Cross-cultural Work Drug-based Approach

Much has been written about the harm from medical short-term cross-cultural work as currently practiced by numerous churches and sending organizations. Although well intentioned, the commonly used drug-based approach to primary care in the short-term cross-cultural work setting is of most concern (Seager; Seager and Tazelaar 2010; Seager 2012).

In reassuming the church's responsibilities for healthcare, it is also essential that we do no harm. The short-term cross-cultural work drug-based approach to primary care is a very recent, but critical, foundational change to Christian cross-cultural work and healthcare.[5] There are few healthcare delivery systems that are more contrary to Christian Medical Commission principles and evidence-based guidelines for safe and effective care. Because of its widespread increasing popularity, and in spite of increasing evidence of patient harm, it must be specifically addressed.[6]

Although effective medicines, with appropriate safeguards in place, could benefit an occasional patient in the short term, the overall effect on the quality of healthcare, as well as on the beliefs/values of both patients and communities is often devastating (Seager 2012; Seager, Seager, and Tazelaar 2010; Gorske 2009a). Space limits allow only two brief examples:

Tremendous investments have been made in attempts to safeguard our U.S. population from the harmful effects of drugs (See Endnote [7] for a partial list of these safeguards). Our patients on the field have little or no access to any of these safeguards, or knowledge of harmful effects, and they are often illiterate. By our actions they are led to believe drugs are the answer to their problems. ("You traveled all this way at such great expense just to leave us with these wonderful medicines.") This belief in the magic of drugs persists long after Western health workers are gone and results in a windfall of ongoing local pharmacy profits, often at the expense of the families' ability to purchase food.

Even in the U.S., with all our safeguards in place, the FDA website estimates that adverse drug reactions *alone,* in hospitals *alone* are "the 4th leading cause of death; ahead of pulmonary disease, diabetes, AIDS, pneumonia, accidents …" (FDA Center for Drub Evaluation and Research 2009).

In addition, the WHO reports that worldwide, "50% of patients fail to take medicines correctly" and there are numerous unnecessary deaths on and off the field due to this risk factor alone (World Health Organization 2004–2007). Yet the Institute of Medicine reports that this problem "often goes unrecognized" by healthcare providers (Institute of Medicine of the National Academies 2004).

For example, a cross-cultural worker from Mexico recently reported the death of a child treated by a short-term cross-cultural team with metronidazole, because the parents thought it would be more effective if all the medication were given at one time. However, nearly all drug related deaths go unreported (Although unexpected and unexplainable deaths are common in developing countries, autopsies are rarely performed).

Even though medicines remain a leading cause of death, we are *not* advocating that their use be discontinued—only that they be used appropriately in accordance with scientific evidence-based guidelines. The U.S. has become the role model for the "Drug-based Society." Regardless of our symptoms, instead of prayer and evidence-based counseling and care, we now seek—and provide—pills. The U.S. Department of Health and Human Services and WHO report that we consume far more drugs per person, both legal and illegal, than any other country in the world (Degenhardt et al. 2008; NIDA 2009).

Though well intentioned, we have now, on the field, as well as in the U.S., replaced Christ-centered, evidence-based healing with physician-centered, drug-based treatment, in spite of the overwhelming scientific evidence of harm (World Health Organization 2010; King et al. 2003; Avorn 2005; The Medical Letter 2006; Wolfe, Lichtenstein, and Singh 1999; FitzGerald 2004; Institute of Medicine of the National Academies 2007; NIDA 2012; Triggle 2007; Peele 1989; Seager 2012; Gorske 2009a).

The harm caused by the dependency-creating approach to healthcare were probably best summarized by Carl E. Taylor, MD, member of the Christian Medical Commission and co-author of the Alma-Ata declaration, at the age of 92, in his plenary address to the GHM Conference:

> If you really understand what we mean, doctors automatically get not only resistant, they get angry. Because what we are saying is the most important health workers in the world are *mothers*.
>
> It is that reality that we have not been willing to face...the arrogance with which we have carried out our professional roles—taking ownership from the community, and assuming that the ownership of the health system is in the hands of the doctors and other health workers. …
>
> That simple message is that if we are really going to do what Jesus showed us to do, it is building up the capacity of the people to solve their own problems (Taylor 2008).

Although any church or long-term cross-cultural work in any country can use CHS&E, a primary motivation for its development was to incorporate the standards of our Christian cross-cultural mentors and evidence-based medicine to optimize all the potential benefits of the medical short-term mission, *without* the harm. For it is not the drugs, but the individual team members that are the short-term cross-cultural work's greatest asset. There is much that doctors and pharmacists can do to truly assist the Church and its communities simply by teaching evidence-based healthcare (including the safe and effective use of medicines) to both patients and healthcare providers. Qualified physicians and pharmacists are also encouraged to support excellent educational work such as Christian Medical and Dental Association's Medical Education International (MEI n.d.). Simply leaving our drugs at home enables medical teams to focus team member skills and resources on those services that

are evidence-based, sustainable, and truly needed (HEPFDC 2011).

Yet Dr. Taylor's biblically and scientifically based plea, "if we are really going to do what Jesus showed us to do, it is building up the capacity of the people to solve their own problems," not only applies to our work in developing countries but to our current commercialized U.S. drug and healthcare industry system. For nowhere is there a greater need for this Christian Medical Commission based approach than in the U.S.

This article's references provide an abundance of evidence-based documentation of the consequences of failing to heed Dr. Taylor and his colleagues' heart-felt, biblically based words. Instead of an integrated, holistic, patient-empowering healthcare system based on scientific evidence, education, and personal responsibility, we have a drug-dependent society based primarily on advertising (FDA Center for Drug Evaluation and Research 2005; Subcommittee on Oversight and Investigations 2008; Tufts 2004; Gorske 2007; Avorn 2005).

This drug-based dependency *strikes at the very heart of the quest for* shalom by the individual, the family, the church and the community, whether in the U.S., or the field.[8]

In contrast, CHS&E's Christian Medical Commission holistic foundation enables demonstration of Christ's most important teachings, as well as scientific standards and guidelines. For example, respiratory infections are one of the leading killers of children and cough and cold medicines have long been documented to not only be ineffective, but to increase morbidity and deaths (American Academy of Pediatrics 1997; ACCP Guidelines 2006). With the global prevalence of infections such as influenza, pneumonia, SARS, and tuberculosis, knowledge of WHO guidelines for prevention, and when to seek medical assistance, is of critical, life-saving importance. (*See Figure 1*).

In addition, the evidence-based importance of love and the healing effects of parental TLC (Tender Loving Care) are emphasized,[9] as well as Christ's teachings on the critical importance of belief (abundantly confirmed by the scientific literature) and prayer (Gorske 2009a) (*See Figure 2*). Instead of creating a dependency on expensive and harmful drug treatment; family self-sufficiency and spiritual values are strengthened, and families are empowered to properly care for not only the current illness, but also all similar illnesses to come, enabling a sustainable, long-term benefit (HEPFDC 2009).

5. CHS&E and "The Slow Motion Disaster": Why is Evidence-based, Participatory Health Education so Critically Important?

Evidence-based guidelines and collaborative care—Saving the most lives and preventing the most suffering

WHO standards require that healthcare guidelines be based on the very best available scientific evidence (World Health Organization 2003). There are now thousands of health education materials available through the Internet and elsewhere; however very few meet this requirement. This can result in as much patient and community harm as any other non-evidence based medical treatment, and can also significantly damage the reputation of the local church and its community health educators.

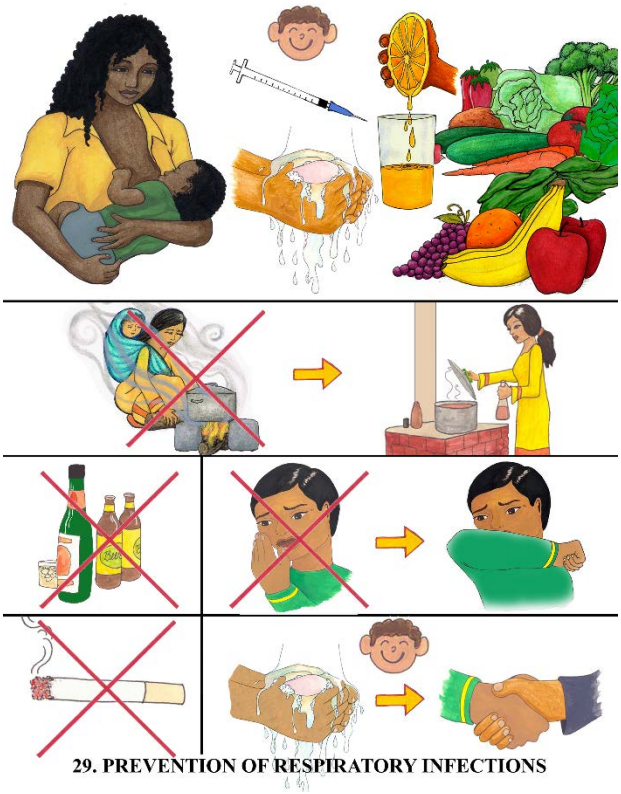

Figure 1

Figure 2

The Christian Medical Commission and its members have also strongly emphasized the need for collaboration with government and health authorities. And if the church community's efforts to collaborate with the local Department or Ministry of Health and medical community are to be successful, it is essential that the teaching materials not be in conflict with WHO's evidence-based guidelines (McGilvry 1981; Paterson 1998; Taylor-Ide and Taylor 2002; HEPFDC 2009).

For these reasons, CHS&E teaching materials incorporate the best available WHO and U.S. evidence-based standards and guidelines and have been frequently updated. Because curative care is needed for approximately 30% of our patients' healthcare problems, CHS&E collaborates closely with the local healthcare community for those patients who may need to be referred for curative care follow-up. (This is also the area in which short-term cross-cultural physicians' and pharmacists' teaching is most critically needed.) However, as emphasized by the WHO, if we wish to enable high quality, evidence-based care for the remaining 70%, primary prevention and health promotion are essential (World Health Organization 2008b). And this, any church, regardless of resources, can do.

For example, CHS&E's, "The 3 Things" lesson is based on WHO international evidence-based guidelines and illustrated in the *Health Education Program for Developing Countries* (World Health Organization 2005; World Health Organization 2009; HEPFDC 2009). It addresses the most important causes of preventable morbidity and mortality in nearly all communities worldwide, urban and rural, developed and developing, and is essential for children as well as adults (*See Figure 3*).

How valuable is this knowledge as medical treatment?

What is this critically important self-treatment which could prevent the suffering and premature deaths of millions of people from every country every year, and at the same time save our healthcare systems (and our countries) from financial disaster?

Figure 3

In addition to the prevention of deaths and suffering, the knowledge found in these simple, evidence-based WHO guidelines is worth trillions of dollars (Chan 2011; Rosenbaum and Lamas 2011). For example, how much do you think a drug company could charge for a pill that would reduce premature suffering and deaths from heart disease alone by just *5%*? Yet this self-treatment is at least *80%* effective, and not just for heart disease, but for stroke and the other leading killers as well, and with no adverse effects. Clearly, *all* of our hospitals and clinics, doctors and nurses, and drugs and surgeries *combined* cannot come anywhere close to achieving these kinds of results.

The WHO and United Nations report that these very diseases will be responsible for bankrupting our healthcare systems, and they are increasing dramatically in frequency (Chan 2011; United Nations 2011). What is this critically important self-treatment that could prevent the suffering and premature deaths of millions of people from every country every year, and at the same time save our healthcare systems (and our countries) from financial disaster?

Certainly this information from the WHO / U.S. Department of Health and Human Services lifesaving is something every man, woman and child in every country in the world needs to know. And yet, almost 8 years later, there are still groups of doctors and nurses from the U.S., as well as developing countries, who are unable to come up with the correct answers to "What are the 3 things?"

The participatory learning process

The participatory approach to education for all age groups as emphasized by our Christian cross-cultural mentors has since been incorporated into numerous international and national guidelines and is an essential component of CHS&E (Bryant 1069; Fountain 1990; Rowland 1990).

For example, for health-screening events, participatory learning usually begins with distribution of the advertising flyers (*see Figure 3*) and continues onsite as patients are waiting in line to register. "The 3 Things" flyers lead people to ask (long before the event) "What are these 3 things that *WE* can do that would prevent 80% of heart disease, 80% of stroke, etc.?" As patients are waiting in line to register, church-based health educators can use the 11x17 inch posters to draw out the answers from the people, using the participatory method and cultural approach that is most effective for their particular community.

The lesson (with the WHO answers: 1) Healthy Diet, 2) Not Using Tobacco, 3) Adequate Exercise) is also included in the *Patient Health Screening and Education Record* that is also available free for downloading. This is given to the patient after personal screening and education for further reinforcement, as well as for multiplication of the lesson to the patient's family and friends.

And *most* importantly, all CHS&E patients are offered follow-up church-based participatory health education meetings for ongoing health promotion and prevention of their most important problems. These evidence-based materials are also available free in 7 languages and enable the local church, regardless of size, resources or location, to resume its responsibility for the health and healing of its community (HEPFDC 2009). This Christ-centered, evidence-based approach is essential for a long-term, sustainable, culture-changing impact. For as noted above, "this is a lifestyle problem, a problem of beliefs and values. It is a spiritual problem, and it will not be resolved until the Church reassumes its responsibilities for the holistic health of its community."

6. The Church and Shalom, or the "Slow Motion Disaster"?

***The church-based participatory learning process--A sustainable approach to the quest for* shalom**

As reported by Dr. John H. Bryant, first chairman of the Christian Medical Commission and U.S. representative to Alma-Ata,

> The initial objective might be to involve the community in deliberations that would lead to a particular health care programme, but the greater objective would be to establish as an ongoing community process the problem-solving cycle, which might also be called the cycle of self-determination (McGilvray 1981, 90).

It is, therefore, the *ongoing* utilization of the participatory learning and problem-solving process that is necessary for individuals, families and communities, not only for the purpose of reassuming responsibility for improving their physical health, but to empower their ongoing quest for *shalom*. The church-based setting and the Christ-centered evidence-based holistic approach to healing are *essential* to this empowering process. These are the keys to the sustainable approach to true transformational development and the quest for *shalom* (Lambourne 1963; McGilvray 1981; Fountain 1989; Fountaion 1990; Fountain 1999; Rowland 1990; Gorske 2012).[10]

But what is the evidence-based effectiveness of this approach? The WHO, "spiritual strategies," and the "Slow Motion Disaster"

The CHS&E approach can be implemented in a wide variety of ways by even the smallest and least wealthy churches. It can range from a simple healing prayer ministry with education / support groups, to more complex approaches with local community health fairs, to CHS&E short-term cross-cultural ministry to other countries.

What is not well known is that WHO evidence-based reports have given even the simple church-based **interventions** for the epidemic of non-communicable diseases the *very highest possible rating* for effectiveness. For example see WHO's *Interventions on Diet and Physical Activity: What Works: Summary Report* (2009):

> Behaviour can be influenced especially in … religious institutions. … Effective (highest possible WHO rating) interventions, are planned and implemented in collaboration with religious leaders and congregational members using pastoral support *and spiritual strategies* (emphasis mine) and include group education sessions and self-help strategies.

This is only the beginning and there remains much work to do. But from a modern, secular, objective, scientific, evidence-based standpoint, it is the *Christ-centered, church-based* approach (*not* the physician-centered, drug / surgery-based approach) to the pending "slow motion disaster" that has been shown to meet the *very highest standards* of effectiveness.

The Congregation and the "Slow Motion Disaster" (Resuming the Quest)

The critical importance of the local congregation in resolving the healthcare crisis and resuming the quest for *shalom* cannot be overemphasized. Dr. McGilvray writes:[11]

> The Christian ministry of healing belongs primarily to the congregation as a whole, and only in that context to those who are specially trained. If healing is understood as above, it will be clear that the entire congregation has a part to play in it. By its prayer, by the love with which it surrounds each person, by the practical acts which express its concern for every man, and by the opportunities which it offers for participation in Christ's work, the congregation is the primary agent of healing. At the heart of this healing activity lies the ministry of the Word, Sacraments and prayer.
>
> The specialised work of those who have been trained in the techniques of modern medicine have their proper place and will be fruitful in the context of this whole congregational life. We have to recognise that a rift has developed between the work of those with specialised medical training and the life of the congregation, so that the congregation often does not see how it can take a real responsibility for the work of a healing institution.
>
> One of the most urgent needs of today is that Christian congregations, in collaboration with Christian medical workers, should again recognise and exercise the healing ministry which belongs properly to them (McGilvray 1981, 34).

CHS&E was developed to enable the local congregation, regardless of size, wealth, resources or location, to begin to accomplish the above. Although churches (especially those that are wealthy) are certainly not limited to Christian Medical Commission based self-sustaining approaches, *all* congregations must begin to reassume their biblical healthcare responsibilities to their community, and they must do so *urgently*.

We have, for well over three decades, failed to respond to the urgent messages of Drs Brant, Bryant, Fountain, Lambourne, McGilvray, Taylor, and their Christian cross-cultural colleagues. The leaders of the U.N. and WHO are not alarmists. The behavior-induced health, economic, and development disaster they describe is real, and it is now upon us. The Church (and *only* the Church) has the holistic foundation and resources to prevent it.

Which will you and your congregation choose: Christ-centered healing and the quest for *shalom*, or the ongoing descent of the "slow motion disaster"? As the following references document, never has the need for the Church, or the opportunity, been greater.

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End Notes

[1] Healthcare cross-cultural ministry, in contrast to many other types of cross-cultural work , must meet international standards and guidelines. The WHO, with its 193 member countries, is the "directing and coordinating authority for health...setting norms and standards, articulating evidence-based policy..." (Best Practices in Global Health Missions n.d.). As this article addresses primary care cross-cultural programs, it is essential that we document the WHO standards and guidelines on which those programs are based.

[2] "Holistic" refers to care of the whole person--body, mind and spirit. Some secular writers have used the spelling "wholistic" as they do not wish to associate the concept with the word "holy." "Wholistic" may enable easier understanding by the lay person and is now becoming a common spelling in the faith-based

community as well. In this article the meaning of holistic and wholistic is the same.

[3] The WHO requires that healthcare guidelines be evidence-based (Best Practices in Global Health Mission n.d.;). Evidence-based means based on the very best current scientific evidence, not on individual or group experience, no matter how extensive (Centre for Evidence-based Medicine n.d.).

[4] The 22-page guidelines also address the complex requirements of healthcare delivery in the short-term medical cross-cultural setting. However, implementing the CHS&E process itself is extremely simple and requires no training (simply read, discuss, and apply). The materials have been used by children for Children's CHE (Community Health Evangelism) and by poor 20-member congregations in Mexico. Height and weight screening, when required, can be accomplished with a simple tape measure and bathroom scale. And even for short-term cross-cultural groups, the process is far less complex than the usual drug-based approach.

Free downloading of all materials is available through the *Health Education Program For Developing Countries (HEPFDC)* www.hepfdc.info website (See "Health Screening" and "Participatory Approaches" pages for CHS&E specific content). However, as the website is utilized in restricted access countries, it does not specifically address the biblically based principles and guidelines on which CHS&E is based.

It is also important to emphasize that the program guidelines do not come from HEPFDC, but from the Christian Medical Commission, WHO, and the U.S. Department of Health and Human Services. Churches and communities with adequate resources are also encouraged to create their own education materials, though care must be taken to ensure they are in compliance with WHO and U.S. evidence-based guidelines (See "Evidence-based guidelines" section of this report).

HEPFDC, through its non-profit, is also an affiliate of the Alliance for Transformational Ministry and collaborates with the Global CHE (Community Health Evangelism) Network. The "Participatory Approaches" page contains links to free participatory lesson plans and picture book versions created specifically for untrained church and community health workers.

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[5] Medicines existed for centuries before Christ, yet that is not how He instructed his followers to heal, not even in the writings of Luke, the physician. It is, rather, our pastors and Christian colleagues in the healing prayer ministries who are actually following the "short-term cross-cultural ministry" instructions of Jesus.

[6] It is very important to recognize that this is a healthcare delivery *systems* problem, *not* a provider-related problem. The intentions of all concerned meet the very highest moral and ethical standards. It is the attempt to utilize the drug-based healthcare delivery system in the short-term cross-cultural ministry setting that is responsible for the patient harm.

[7] These U.S. safeguards include: Highly trained physician, nursing and pharmacy personnel. Continuity of care (The prescribing provider knows the patient and the medicine and is available for monitoring of adverse effects--An essential minimum requirement for adequate quality of care). A literate, educated population. Package inserts in the patient's doctor's language. Patient instructions and black box warnings in the patient's language. Patient medication lists to ensure no duplication or dangerous incompatibility with drugs the patient has at home. Pharmacy computers and policies and procedures to ensure the patient receives right drug, right dose, right time. Emergency rooms and intensive care units to care for life threatening adverse effects. Poison control centers to treat accidental poisoning. Government law enforcement and treatment agencies to manage over-the-counter as well as prescription drug addictions, and so on.

[8] Space limits do not permit adequate review of this critically important subject. For those who wish further documentation, please see the references, especially Greg Seager's book, *When Healthcare Hurts* (Seager 2012).

[9] Dr. Paul Brand, long term cross-cultural worker to India, in his book *Fearfully and Wonderfully Made* (Brand and Yancey 1987) reports studies showing that simple TLC reduced mortality by more than 25%.

[10] Numerous additional Biblically based guidelines with participatory lesson plans to enable the Church to assist the community in its quest for shalom are available. "Training of Trainers" courses are also offered (Rowland 1990).

[11] From *The Quest for Health and Wholeness* by Dr. James C. McGilvray, the first director of the Christian Medical

Commission. Although last revised in 1981 and no longer in print, this excellent book is now available free for downloading (see References) and remains essential reading for all Christians.

Leaves from the Tree of Life: Healing the Nations through Global Health Service

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IN THE CURRENT FIELD OF GLOBAL HEALTH, individuals and organizations address health problems and resource disparity across cultures, and many majority world workers seek to heal their neighbors within their own cultural contexts. They do so with various motivations and represent all Christian denominations as well as other religious, secular and governmental organizations. Christians have historically led the way in pioneering healthcare and promoting human flourishing. In addition, as the Church has expanded in the global South amid material poverty and disease, she has taken on a significant role in care for the sick and the promotion of health.

Globally, our common experience with the contrast of disease and death, health and healing can be thought of as a parable of the gospel told in the fabric of our lives. Pulliam suggests, "There is nothing that speaks more of the reality of sin and judgment than disease and death, and there is nothing that reveals more of God's saving love and grace than healing and health" (Pulliam 2000, 63). The only meta-narrative on Earth that fully explains both the wonder of life, the cause of its problems, and its ultimate solution is found in God's special revelation. John Wilkinson writes, "Human health and wholeness is the main topic of the Bible… it is only when human beings are whole and their relationships right, that they can be described as truly healthy" (Wilkinson 2002, 7). Sulmasy agrees, "Healing is truly an evangelical act. It announces all this good news. . . [it is] a special sign of God's promise of universal right relationship" (Sulmasy 2006, 27). This paper presents a brief perspective that articulates a Scripture-informed understanding of God's design to heal the whole person and all nations, and how His church can more effectively engage the nations in this new millennium.

Foundations

The Bible gives a picture of health that is both holistic and impaired. From the beginning, man and woman were created with divine creative genius and given the cultural mandate as stewards of creation with both intimate relations with God and perfect health, including access to the Tree of Life (Gen. 2:9; 3:17). After the Fall, however, the biosphere was corrupted, mutations mounted with malevolent outcomes, hard labor was required to work the land, relationships were impaired, pain and suffering became ubiquitous and human flesh was subject to decay, disease and physical death. Man and woman were banished from paradise, and were barred access to the Tree of Life that could have sustained their life & health (Gen. 3:19, 24).

The fall of mankind gives us the foundation to understand the phenomenon of disease, disordered relationships, depression, and disasters. It also demonstrates the need for a plan of redemption. Sin has health consequences in this life, and disease can be caused by ubiquitous original sin, corporate sin, generational sin, personal sin, or by demons (John 5:14; Luke 13:10-13). This truth sets the stage for the ultimate defeat of Satan and the purge of sin and corruption from the biosphere and society that came with the Fall. It provides a tantalizing longing for the hope to once again gain access the Tree of Life for healing (Rev. 22:2). Disease presents an opportunity to remind humanity of the corrupted state of this epoch of history, and to feel the need for God. Healing is an

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opportunity to get a glimpse of both God's sustaining grace and His desire to heal brokenness. Suffering is a just consequence of living in this sin-saturated world, and is multiplied in those who reject a healing relationship with their Creator. Throughout the Scripture narrative, God clearly demonstrates a desire to heal His people (Exod. 15:26; Mal. 4:2; Luke 10:9; Rev. 22:2). He provided them laws including a unique sanitary code which preserved their health through centuries of wandering and persecution (Short 1966, 37-46). Redemptive history can therefore be thought of as God's effort in restoring Eden's state of holistic health, both in this life and in the age to come, to the people He has called out from all nations to be holy. This is the good news that is the core message from God to mankind that His people are called to live and proclaim.

Healing

Healing can be divine or derived. God can alter the expected biochemical processes in the physical matrix of life to restore human health at appointed times and for specific purposes, namely to establish His fame among His people and the nations and to express His loving favor toward humanity. Yet He also gave humanity a cultural mandate to steward the Earth's wealth of resources to develop the Earth and its people toward better health and wholeness, working within natural laws and systems. He provides *imago dei* intelligence and curiosity to discover through scientific and experiential inquiry various innovative treatments and procedures to promote healing. He made Himself known through general revelation as Restorer and Healer to all nations, and He also gave His people Israel the call to proclaim the specific revelation of His word to every nation as a blessing. The Messiah was portrayed as one who would heal the world by becoming flesh and overcoming the curse of death through His own suffering.

The connection between physical healing and spiritual transformation is strong in the Scriptures, as God seeks that others be reconciled to Himself and experience the blessing of a life-giving relationship. This relationship leads to a state of complete wholeness of body, mind and spirit which is summarized in the Hebrew word שָׁלוֹם *shalom*. This relationship was characteristic of life in Eden. Humanity has experienced some measure of this life of *shalom* at various times in history, and the call to God's people is to promote this *shalom* around the world. Reconciling lost humanity to God in a thriving relationship with their Creator can be thought of as making *shalom* between God, humanity and the environment and seeking to restore complete health to those made in the Creator's image and likeness. This healing is to be extended to every area of life affected by the Fall, and will only be partial in this epoch of history. Schaeffer called this "substantial healing" based on the finished work of Christ and said, "This is our calling" (Schaeffer 2001, 158). Global health ministry is one of many means to bring the blessing of the healing work of God to the world.

Human Flourishing

The ambitious Millennium Development Goals project of the United Nations to end global poverty by the year 2015 includes four specifically health-related goals: a drive to reduce child mortality (goal number 4), to improve maternal health (goal number 5), to combat HIV/AIDS, malaria and other diseases (goal number 6), and to provide access to affordable essential medications (goal number 8E) (www.un.org/milleniumgoals). With the global disparity in access to healthcare services, essential medications, and vaccination programs, Christian global health ministry from resource-rich countries is in a unique position to facilitate some of these goals in a cooperative manner, working with both governmental and non-governmental organizations. The burgeoning numbers of Christ-followers in developing countries is becoming a growing resource for these efforts.

This will require significant interreligious dialogue. As one cross-cultural surgeon in North India learned, Christians must rise above their often insular beginnings and "not limit the field of cooperators" (Gettman 2005, 13). There are movements like these to heal the nations that Christians of all denominations can endorse and partner with, since many of them are inspired by Judeo-Christian principles, such as the intrinsic value of human life, ecological stewardship, social justice, care for the poor, equality, and debt forgiveness. This is what N.T. Wright calls working cheerfully "with the grain of good will" with people of all faiths or no faith in the art of "collaboration without compromise and of opposition without dualism" (Wright, N.T. 2008, 269). By removing barriers such as early death, illiteracy, hunger, religious oppression, and cultural

isolation, these goals could provide unprecedented opportunity for all nations to have better *access* to the message of hope found in the gospel of Jesus Christ. This movement also gives workers in creative-access countries an internationally acceptable motive for service among cultures typically hostile to an evangelistic agenda.

While the Millennium Development Goals are influenced by and consistent with Judeo-Christian principles, the element of attribution of healing to God and the transforming and healing effect of the gospel of Jesus Christ are not expressed. Mangalwadi writes, "Death and decay make all human endeavors futile, even absurd," apart from the resurrection hope found in Christ (Mangalwadi 2009, 219. Therefore, the Christian health worker must bring this element of proclamation to their work if there is to be any substantive and lasting change in the hearts and minds of those served as we move toward the future. The challenge is to work within the influential "networks and structures of cultural production" to bring about the greatest change for the greatest good, as Hunter articulates so well (Hunter 2010, 42). Effective Christian witness is a witness to the structural powers of societies that are universally corrupted and inadequate to accomplish God's purposes for creation. These fallen structures, including health delivery systems and governments, thus may end up constraining human flourishing instead of promoting it. However, these powers can be redeemed by the salt and light of the followers of Christ as they engage them and speak influentially into their endeavors (Davis 2009, 89-103). We must be reminded that our goal should be not to create and achieve our own ends, but to align ourselves with God's ends.

Healing in the Scriptures

The Hebrew scriptures give a picture of God's desire to heal *rapha* (disease—a common result of disobedience to the Law), to restore (to a more original good state—before the results of the fall), to make whole (instead of fragmented), to give life (and avoid death), to speak blessing (instead of cursing), to deliver or save (from danger and enemies), and to forgive sin (the cause of much disease). Thus, global health ministry seeks to fulfill God's desire among the nations.

Similarly, the Greek scriptures reveal a very holistic view of health. This view is similar to, but much more expansive, than the definition of health from the World Health Organization: "a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity" (www.who.org/). Jesus and His disciples healed (*therapeuo and iaomai*) the sick and this was an integral part of the sending forth of the 12 and the 72 to preach and heal. *Sozo*, by contrast, although translated "healed" several times, actually connotes more of the meaning "saved or delivered" in a spiritual context, and is often associated with the forgiveness of sins.

Paul describes the way God rescued the redeemed from sinful unproductive and destructive lives by his kindness and mercy. "He saved us through the washing of rebirth (*paliggenesia*—new birth, reproduction, renewal, e.g. after the flood), and renewal (*anakainosis*—renovation for the better) by the Holy Spirit, whom he poured out on us generously through Jesus Christ our fSavior" (Titus 3:3-6). This word for renewal (*anakainosis*) occurs only one other time in the Bible, in Matt. 19:28, when Jesus describes the renewal of all things in the new heaven and new earth. We live in the "already and not yet" state of salvation of our bodies and souls.

> All material things, the human body included, when the creature, now travailing in labor-throes to the birth, shall be delivered from the bondage of corruption into the glorious liberty of the children of God. Regeneration, which now begins in the believer's soul, shall then be extended to his body, and thence to all creation" (Jamieson, Fausset, and Brown 1997).

This is the blessed hope for the afflicted, and the good news of the gospel, the power of God for those who believe. It shows that God's grand scheme is to restore a state of harmony with creation and the crowning glory of His creation—to gather worshipers from the vast array of cultures that He intends to heal and bless forever.

The whole of Scripture portrays God as not only Creator and Redeemer, but also as Healer. The thread of redemptive history moves seamlessly from Eden's wholeness and harmony, through the life-giving yet condemning nature of God's law, through redemption wrought by Jesus' atonement, through the Spirit's transforming power to the disciples, to the apocalyptic images of the triumphant Son of God, a passionate defender of His people whom He strives to save and redeem and heal—for

their good enduring pleasure, and for His supreme and deserved glory.

Global Health Ministry

Based on this understanding of the flow of redemptive history, what does this mean for contemporary disciples in a pluralistic context? How should we engage our complex world with this wonderful and terrifying message to bring the healing to the nations? The Church's role in care for the sick and health promotion has a long historical precedent since the First Century CE (Armstrong 2011). Health-related cross-cultural ministry have significant strategic advantages for gospel proclamation and health promotion. The bridges that can be built even within traditionally hostile fields (such as Iran) for the healing of the nations have been recognized even by critics (Mahdavi 2005, 169-91). Grundmann gives a comprehensive history of medical cross-cultural ministry in the 19th Century and concludes that cross-cultural work must give a credible account of the "corporeality of salvation" in their respective witness. "At the root of too spiritual a concept of mission and too materialistic a concept of health lies a misconceived, non-biblical anthropology which profoundly distorts the witness to God incarnate in Christ" (Grundmann 2014). This leads to life, life in abundance (John 10:10)—true human flourishing. Healthcare is an opportunity to express love in action, to apply truth, to proclaim the Lord's favor, and to expose large populations to God's people and the message revealed in their lives and their words.

Working toward health and wholeness of body and mind is not to labor in vain, because any work to restore or redeem the fallen creation is to cooperate with God's intention for the creation (1 Cor. 15:58). N.T. Wright develops this clearly: "All we do in faith, hope, and love in the present, in obedience to our ascended Lord and in the power of his Spirit, will be enhanced and transformed at his appearing" (Wright, N.T. 2008, 143). The hope of the resurrection of the bodies of the redeemed supports and does not undermine work toward physical wholeness. Caird writes, "Any achievement of man in the old order, however imperfect, provided it has value in the sight of God, will find its place in the healed and transfigured life of the New Jerusalem" (Caird 1966, 300). We cooperate with our Creator in the movement to purge and restore a harmonious world in the area of human and ecological health whether it's on a large or small scale. "All of our work *now* contributes to the content of the new creation" (Wright, C.J.H. 2008, 219-20). Christ's resurrection was the beginning of the new creation, and when Christ returns to make all things new (Rev. 21:5), "it will be to complete the work that we, His followers, have begun in His name" (Stearns 2010, 69).

Fountain gives evidence of the power of positive words, prayer, hope, and forgiveness which is intrinsic to the gospel message and which overcomes mental and physical illness, addictions, and sin, and leads to incremental levels of human flourishing, even as death is approached (Fountain 1999, 255). Though the Scriptures are replete with examples and expressions of God's desire to heal, there is full acknowledgment that our hope is not in this physical body (2 Cor. 4:16-18), which will not last in its current form. In fact, motivated by hope in the resurrection of the body, afflictions themselves can bring us to renewed devotion and submission to His will in all circumstances.

Reconciliation

As ministers of reconciliation, workers in global health ministry are reconciling people to the environment (including microorganisms, nutrition, clean water, animals, medicinal herbs); to each other (peace-making, family cohesion, care for neighbor, forgiveness, a more just society); and to themselves (mental health, self-care, stewardship). The good news, however, is that God is reconciling the world to himself to the degree that His ambassadors proclaim and demonstrate His truth (2 Cor. 5:17-19). "Anything less," writes Miller, "is anemic, suppressing the truth, distorting the gospel, stifling the kingdom, disengaging the church, and boring the world" (Miller 2001, 278). For true transformational healing of the nations, we need more than ever, "the rock-like foundation of faith in God on which to build the kind of life for which so many crave. All else ends in atrophy and disillusion" Lloyd-Jones 1988, 63). This reconciliation involves the totality of the creation. "The gospel is good news about personal, social, ecological, and cosmic healing and reconciliation. It is good news to the whole creation-to the whole earth and in fact to the whole cosmos" (Snyder 2001, 244).

The task of the church is not primarily to make people happy, or healthy, or good, though those are indeed results and secondary purposes of the church. Her essential task, writes Lloyd-Jones, which no medical system can offer, is to restore men and women to a right relationship with God. This is what separates Christian health-related cross-cultural ministries from purely humanitarian aid efforts as expressed in the Millennium Development Goals and practiced among secular colleagues. "Man's real problem is not simply that he is sick, but that he is a rebel" (Lloyd-Jones 1988, 64). Instead of palliating and thinking the world does not need the church, "they fatally neglect the only power that can enable men to function truly, that is the Gospel of Jesus Christ (Rom. 1:16)" (Lloyd-Jones 1988, 68).

Word and Deed

Bryant Myers notes that all true disciples are witnesses all the time. The "being with" of cross-cultural ministry for full gospel-of-the-kingdom impact requires a balance of preaching, healing, and casting out. Effective evangelism needs to be the "second act" following loving acts (e.g. Acts 2:14; 3:11-12; 7:2), "living lives in ways that result in the community or some of its members asking questions of us to which the gospel is the answer" (Myers 2011, 21). Not beating them over the head with answers to questions they are not asking. Fielding writes, "Our objective is for them to be shocked by the depth of our compassion and, consequently, be eager to hear about the hope and peace within us" (Fielding 2008, 130).

Displaying compassion in an authentic way is what Jesus meant by letting one's light shine, that others would in turn glorify God (Matt. 5:16). Phil Butler notes that the crowds came to Jesus with their own self-acknowledged needs, and he started where they were. Their agenda was his agenda. 11% came with spiritual questions, 89% came with ordinary issues such as illness. He never gave them a test or required religious action prior to His response (Butler 2009). "As a result of this, his fame spread." (Luke 5:15) Following this pattern, it is vital to address people's felt needs, but ascribing healing to Jesus that facilitates His fame among the nations.

Resource sharing through linking social capital has been demonstrated to lead to church growth and subsequent human flourishing, even through short-term global health ministry (Priest 2007, 175-89). However, there is a need to ensure that health care services are more than just cheap "bait" for evangelism, but that they indeed graciously serve the longitudinal health needs of the poor, cooperate with existing healthcare infrastructure, are culturally sensitive, and do no harm. This would be consistent what Samuel Escobar called "transforming service" which validates and confirms the truth and fullness of the gospel message (Escobar 2003, 143-54). Muslim critics of gospel outreach in India presume that health care and other development services are just smoke screens for a crusading evangelistic agenda with no thought for actually helping the people (Sikand 2003, 2937-39). Understanding these perspectives helps guide approaches to evangelism in the context of authentic effective health service. There is no place for deception in engaging the nations for healing (2 Cor. 4:2). It's been said that people don't care how much you know until they know how much you care. "Service is the legitimate means of acquiring the power to lead" (Mangalwadi 2009, 190).

Interreligious dialogue in health delivery settings builds bridges of understanding to move people on the development continuum from disease to health, from physical health to spiritual health, from darkness to light, from hate to love, from death to life, from oppression to release, and from tribes to the multi-ethnic covenant community of God.

Humility and Contextualization

Global health workers must also be aware that it is God who heals. Sulmasy writes, "All any clinician has ever done has been to cooperate with God's healing action" (Sulmasy 2006, 94). Western culture after the Age of Enlightenment sought to base its understanding of health in reductionist scientific terms, characteristic of much of the training of health professionals, which can be a source of pride. This fact-value split lead to the "excluded middle"—ignoring the interface between the natural world and the spiritual realities. There is a movement toward restoring a more integrated holistic view of health in the West possibly the result of interreligious dialogue with the global East and South, including placing healing value on religious commitment and prayer (Duckro and Magaletta 2009, 211-19; Marks 2005). One needs to understand the limitations of one's own cultural reference points, and seek to learn as much from other cultures as to teach. Ballenger writes of the light of

general revelation given to all nations: "[Cross-cultural ministry] is not a one-way street. … [It] may be described as the sharing of light, but the light is neither owned nor controlled by the light-bearer" (Ballenger 2006, 391-204). This need to discern the wholesome truths and beauty of every people-group among whom one serves in order to contextualize the gospel message has been analyzed among the James Bay Cree. Their spiritually neutral and health-promoting folk medicine practices, which cross-cultural workers had rejected, led to cultural alienation (Niezen 1997, 463-91). Historically, close parallels have been drawn between the dogmatism of scientific bio-medicine and the dogmatism of Christian witness which utilized bio-medicine in world outreach. In Lebanon, as was the case in China and India the 19th Century, science and medicine were integral to the broader spiritual commitments of cross-cultural ministry. The theological vision was to seek and apply truth to counter superstition, but trust in science ended up superseding trust in the gospel (Elshakry 2007). More effective and longer lasting cultural transformation is documented among several global health workers who modified Western health care practice to the cultural norms and healing practices of the host country in India (Singh 2005, 128-53). Discerning the spiritually harmful aspects of folk medicine practice (i.e. witchcraft, spiritism, and idolatry) from spiritually benign and non-harmful therapies has been shown to be a bridge-builder for church planting in the Philippines (Seale 1993, 311-20). These contextualized approaches must be creatively pursued if there is to be progress in the healing of the nations.

Suffering and Sacrifice

As the gospel is propagated and the church is planted, resistance develops. The greatest advances of the gospel have come through suffering and sacrifice. Though Jesus' disciples are called to be good stewards of their bodies as temples of the Holy Spirit (1 Cor .6:19-20), there are times when sacrifice, suffering, and pain are *required* to accomplish his purposes (Seale 1993). Mangalwadi writes, "Willingness to choose suffering and self-sacrifice for the sake of righteousness is to walk the way of the cross (Mangalwadi 2009, 137)." This is why Paul could endure all things for the sake of the elect (2 Tim. 2:10), surrendering the enjoyment of common grace for the greater good of others.

Summary and Conclusion

Disciples are called to labor within the chaos of this sin-sick world, to express Jesus' love and compassion amid suffering humanity, knowing that we cannot "reverse the curse" completely by ourselves, but we can be emissaries to be used of God to rescue those who will be healed and saved. We can cooperate with existing governmental and non-governmental organizations of various stripes and across denominational and religious barriers with those who also seek to promote human flourishing. We can also cooperate with God in healing, being imitators of Christ who wept for the nations, healed many and walked the road of infirmity to the cross to heal all His children. God's desire along the timeline of history has been to restore untainted and "cool of the evening" fellowship with His beloved creation—to once again give them access to complete life, healing, and deep abiding relationship with the whole of creation and their Creator who loves them. He is bringing it to pass as He promised in an amazing colorful unfolding of history and He invites His children to join Him.

Global health ministry is a wonderful opportunity to see God accomplish His will for humanity, and to participate in cooperative efforts to promote human flourishing. However, if the opportunity is missed to make the connection between the physical and emotional infirmities which the nations are seeking relief from, and the true holistic healing that comes from relationship with God through Christ alone, we have squandered the resources and our efforts are reduced to patching bodies in fruitless sentimentality. Evangelism must be integrated into efforts to heal. It must be creatively expressed across cultures so that people make the connections and therefore desire to know the Lord, becoming written into the meta-narrative of God's healing story as those listed in the Book of Life who gladly share tea from the leaves of the Tree of Life and worship the Healer forever.

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