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Health and Healing in America

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I. HISTORICAL PERSPECTIVE

Only in the 20th century could sizeable social groups anticipate at birth an average life expectancy of 50 years or more. By the time this century ends, almost all countries in both the developed and the developing world will have life expectancies at birth exceeding 65. A large number of countries will have exceeded the biblical threescore and ten as an average life expectancy, and many will have surpassed 75 years.

This transformation in 100 years results from remarkable gains in the ability to control an often hostile environment despite significant setbacks in reducing hazards which are self imposed. At the same time, the transformation presents ethical dilemmas concerning the role individuals and societies should play in societal improvement.

First, the gains. There is no way in 1982 to reconstruct the hopelessness, the depression, the anxiety, and, at times, the terror experienced by people on a day-to-day basis because of infectious diseases in years gone by. Beyond the control of individuals, bubonic plagues and smallpox outbreaks were constant reminders of the capriciousness of nature and the frailty of man. The royal families of Europe in the 1840s were unable to cope with smallpox any better than the Blackfeet Indians.

Despite improvements in sanitation, living conditions, and especially nutrition, infectious diseases still caused the great majority of deaths even in this country in 1900. Indeed, pneumonia, influenza, tuberculosis, and diarrhea caused 540 deaths per 100,000 population each year while diseases of the heart caused only 137 deaths per 100,000 per year. To understand the situation in the United States prior to that time, one can look at Third World Countries today where, in some areas, half of all children born die before their fifth birthday, largely because of infectious diseases.

All of this has changed. One infectious disease, smallpox, has been eliminated as a scourge of the human race. In this country, only pneumonia and influenza remain on the list of the Ten Leading Causes of Death. Not only do children stand a good chance of avoiding measles, mumps, rubella, diphtheria, tetanus, pertussis, and polio, but there are pediatricians practicing in the United States who have never seen any of these "childhood diseases." The speed with which the infectious diseases have been brought under control is exceeded only

by the speed with which people have forgotten the risks which once existed. Young parents today are frequently apathetic about providing polio immunization to their children, having no recollection of the annual summer anxiety which beset parents in the 1950s. In one lifetime the

risks have changed so dramatically that no thoughtful person would elect to return to the "good old days" when it comes to infectious diseases.

There have also been areas devoid of gains. Throughout the infectious disease era, the other leading cause of death and disability was violence, both intentional and unintentional. These included intentional injuries as the result of passions between people, suicides often as a result of passions from within, and injuries resulting from falls, burns, drownings, and other by-products of work and play. The control of infectious diseases has no parallel in injury control. Civilization has succeeded only in increasing the methods and devices resulting in intentional and unintentional violence. Fatal injuries now account for the greatest number of years lost before age 65 in the United States. Control techniques have been noticeably meager. In counterbalance to the gains, the most significant setbacks are to be found in the increase of risks accepted voluntarily by individuals. Two are worthy of special note.

Almost 1,000 people die prematurely each day in the United States as the result of smoking cigarettes. Cigarette smoking increased rapidly during both World Wars, and by mid-century about half of the adult males in this country smoked. Female smoking rates lagged by two or three decades. Despite the intense adverse health effects now recognized in cigarette smoking, it was not until the late 1950s that the scientific community came to a full awakening of how injurious cigarettes are. It was not until the early 1960s that the Surgeon General of the United States published his now famous account of smoking and health. One reason for the delayed appreciation of this hazard is the relatively long incubation period required. An incubation period of 14 days in smallpox leads to rapid recognition of cause and effect. A 20-year, 30-year, or even 40-year incubation period for cigarette smoking often obscures the cause and effect relationship. In addition, cigarette smoking does not lead to a specific, unique syndrome. Instead, it leads to an increased incidence of common ailments which also kill non-smokers, namely, heart disease, strokes, lung cancer, pharyngeal cancer, etc. Death certificates are coded as such and rarely list cigarette smoking as the cause of death. It is now clear that early death is experienced by over one-third of a million Americans per year as the result of cigarette smoking, and that this toll will be extracted for many years to come.

Future historians will marvel at the tolerance of this generation. Society would be mobilized with a fraction of those deaths if they were due to toxic shock syndrome, Legionnaires' disease, nitrites, or saccharin. Historians will be puzzled by the example provided by health officials, church officials, and public figures such as entertainers who set an example by smoking. What will be particularly baffling is a social tolerance which allows tobacco companies to spend a billion dollars a year to promote this lethal agent. The government's response is to counter the one billion dollars in advertising with a few million dollars to promote truth. Finally, historians will not spare those who actually made money by growing, processing, and selling cigarettes. Those profits are made at the expense of a tremendous toll of disease and early death. In another context we

might refer to those profits as blood money. The other risk, not unique to this century, involves alcohol abuse. Alcohol abuse has always been associated with violence, including homicides and suicides. Yet this century has allowed the mixture of alcohol and machinery, automobiles, airplanes, power tools, etc. The risks of alcohol, both to the individual and to other members of

the society, are increasing.

II. CURRENT STATUS OF HEALTH IN THE UNITED STATES

The traditional approach to describing health status has been to list causes of death. The five leading causes of death in the United States in the late 1970s are shown in Table I. A more accurate, but still deficient, way of providing a health profile is to examine causes of premature death and reasons for visiting physicians. Premature deaths in the late 1970s can be characterized by years of potential life lost before the age 65. This gives a somewhat different perspective as seen in Table II. To broaden the perspective even more, the five leading causes of physician visits are shown in Table III.

TABLE I.
FIVE LEADING CAUSES OF DEATH IN THE UNITED STATES, 1975

Causes	Rate Per 100,000
Heart Disease	336
Malignant Cancers	172
Strokes	91
All Accidents	48
Influenza and Pneumonia	26

TABLE II.
YEARS OF POTENTIAL LIFE LOST IN THE UNITED STATES, 1975

Causes	Ages 1-64 Total Years Lost	Percent of Total Years
All Accidents	2,589,552	25
Cancer	1,802,820	17
Heart Disease	1,769,180	17
Homicide	625,806	6
Suicide	588,276	6

TABLE III.
ESTIMATED NUMBER OF PHYSICIAN CONTACTS BY PRINCIPAL DIAGNOSIS IN THE UNITED STATES, DECEMBER, 1981

Causes	Estimated Number of Physician Contacts
Heart Disease	4,956,000
Accidents and Adverse Effects	4,610,000
Diabetes Mellitus	2,312,000
Chronic Obstructive Pulmonary Diseases and Allied Conditions	2,025,000
Malignant Cancers	1,403,000

While complex analysis of mortality, morbidity, and quality of life issues is desirable for priority setting, for simplicity, this discussion will be limited to an examination of the five leading causes of years lost prematurely in this country.

Accidents. Over 100,000 deaths occur each year as the result of accidents. Less than half of these are due to motor vehicle accidents, the remainder involving accidents in the work place or falls, burns, and drownings in home or recreational settings. Although the number of persons dying from accidents is smaller than for heart disease or cancer, the early age at death for many accident victims makes this the leading cause of years lost before age 65 in this country. Between one-third and one-half of all such deaths involve alcohol abuse. Sufficient experience has been accumulated in this country and in other countries to indicate it is possible to reduce the alcohol-related accident mortality. Increased taxation, a reduction in hours and convenience of buying alcoholic beverages, redefining what is acceptable social behavior, and strict laws which are enforced for drinking and driving are useful.

The requirement of infant restraints in Tennessee has provided a lesson to all states in how to reduce the highway mortality for children under 4. Seat belt laws in 20 countries have shown society does not have to tolerate the highway wastage of small children common in this country. Air bags could have proved a practical way to reduce deaths at a relatively small cost. As a society, we have demonstrated our willingness to spend $20,000 to salvage one person a year from end stage renal disease, but have also decided that a few hundred dollars is an intolerable price for an air bag.

Demonstration projects have shown it is possible to reduce mortality from burns, drownings, and falls, both in the work situation and out of the work situation, and yet, as a society, we have not moved in a determined way to realize these obvious benefits.

Cancer. Cancer is the second most common reason for years lost before age 65 in this country, and is considered by many to be the most feared of all conditions. A recent report by the World Health Organization indicates that one-third

of all cancers are totally preventable and another one-third are totally treatable. Interestingly, many of those preventable are not treatable. The most common cause of preventable cancer is cigarette smoking. Despite what would appear to be an obvious funding conclusion for those in government and in Congress, major attention and funding are provided for research into the remaining third that are untreatable and not preventable rather than funding a massive program to apply the knowledge we already have to salvage hundreds of thousands from preventable cancer.

Heart Disease. While heart disease is listed as the leading cause of death in this country, it is only third in terms of the years lost before age 65. Even here, we find much of the mortality due to heart disease is preventable. The leading risk factors which could be altered are cigarette smoking, high fat diet, obesity, untreated hypertension, and probably inadequate exercise. In the past decade, fatal heart attacks have been greatly reduced, probably as a result of the early efforts to alter the above risk factors.

Homicide and Suicide. Homicide and suicide are the fourth and fifth leading causes of years lost before age 65, and again, one-third to one-half of all deaths in these two categories

involve alcohol abuse. Some studies have shown homicides peaking on Saturdays and suicides peaking on Mondays, both possibly related to alcohol abuse. For the non-white population in the United States, homicide is the leading cause of years lost before age 65 for the entire population.

It is obvious that even without additional knowledge breakthroughs in this country, we are far from realizing our potential to reduce mortality. The lost opportunities, the large number of premature deaths, and the misplaced priorities in funding and action provide a heavy burden for the collective conscience of churches, government, and society in general.

III. PRINCIPAL BARRIERS TO IMPROVED HEALTH IN THE UNITED STATES

A. Failure to incorporate the individual into health improvement efforts. It has become increasingly clear in recent years that individual actions are far more powerful than all of 20th century science in altering mortality risks. A 50-year-old male in the United States can expect only six additional years of life in addition to what his grandfather could expect at age 50. On the other hand, a 50-year old male in the United States can expect to live over 10 years longer by practicing simple health habits (such as not smoking) as compared to his 50-year-old counterpart who does not practice those health habits.

It is also clear that a small segment of the U.S. population has shown considerable change in the last 10 years in terms of smoking cessation, diet improvement, exercise, etc. However, this is largely a social class phenomenon which is yet to have much influence on the lower middle or lower socioeconomic classes. From a theoretical point of view, Americans would be expected to find this new knowledge attractive. The idea of rugged individualism and the ability to determine one's own fate, including one's health fate, is consistent with much of America's history. Values, ideas, and philosophies frequently promoted in Christian environments would seem to complement those forces. For instance, the idea of free will or freedom to be, as well as the promotion of stewardship in

money, time, and talents provides hope that church settings could be ideal circumstances for such health promotion. Under even the best of circumstances, the changing of personal health habits should be seen as a long-term, slow, and difficult project but one which must take priority in the 1980s and 1990s.

B. Fundamental defects in the entire health system. It is easy to become euphoric and prideful at the successes experienced by public health in this century. One should savor those successes. Nonetheless, the dominant fact of public health today is not a story of successes, but a story of failures and missed opportunities. It is a story of children who continue to suffer measles, retardation from measles, and even death from measles two decades after the vaccine has been widely available. It is a story of continuing tuberculosis transmission in this country long after the tools have been available to stop that transmission. It is a story of needless toxic exposures in the work place. It is a story that includes one million cases of pelvic inflammatory disease per year resulting in 110,000 young women becoming sterile and 900 dying. It is a story of needless deaths due to infections acquired after people enter hospitals. It is a story of preventable deaths due to accidents, cigarettes, and alcohol abuse.

A look at the Third World makes the story even more depressing. Literally hundreds of millions of persons live with disease and filth that is a mockery of our stewardship of knowledge.

When we look at the world's poorest countries with a per capita gross national product of less than $200 per person per year and recognize that even in those countries they have lower socioeconomic groups, it becomes clear that our knowledge, our expertise, and our experience are not doing them much good. The story of public health today is one of continuing missed opportunities, sins of omission.

The reason for this is a defect in our entire health care system that is so basic it is passed over in most analyses.

If a surgeon develops a new cardiac surgical technique, the technique need not to be shown cost beneficial to be automatically funded. If a new generation of "CAT" scanners is developed, it is automatically funded. If new diagnostic laboratory tests are developed, the system (Medicaid, Medicare, third party insurance, etc.) will automatically fund them. On the other hand, public health and prevention are held to different rules. A vaccine must be shown to be safe and effective before it can be licensed. This does not mean that it will be automatically funded. Prevention techniques such as measles vaccine must also be shown to have positive benefit cost ratios. This benefit cost ratio is not demanded for drugs and other therapeutic approaches. Finally, even after measles vaccine is found to be safe and effective, even after measles vaccine is shown to provide ten dollars in savings for every one dollar invested, it must still be justified every year and it must compete for funds for other programs every year. It is not automatically funded. If we are to see major improvements in morbidity and mortality in the next decades, we shall have to lose our tolerance for the many missed opportunities; we must lose our tolerance for an archaic funding system; and we must lose our tolerance for the mindless provincialism which seeks to limit our knowledge, expertise, and experience to this country.

Reaching our health potential will require nothing less than a revolution to give prevention absolute priority rather than making it the recipient of crumbs

from the table. Prevention should have this priority not in order to save health care money but in order to improve the quality of life. Churches could spark that revolution.