Dr Martin Luther King popularized the notion of the Beloved Community, a term first coined in the early days of the twentieth century by philosopher-theologian Josiah Royce. Dr King envisioned the Beloved Community as a society based on justice, equal opportunity, and love of one’s fellow human beings. As explained by The King Center, the memorial institution founded by Coretta Scott King to further the goals of Martin Luther King:

“Dr King’s Beloved Community is a global vision in which all people can share in the wealth of the earth. In the Beloved Community, poverty, hunger and homelessness will not be tolerated because international standards of human decency will not allow it. Racism and all forms of discrimination, bigotry and prejudice will be replaced by an all-inclusive spirit of sisterhood and brotherhood.”

The Beloved Community and the National Health Care Crisis

In response to a variety of health problems, we have developed highly technological solutions that, only a short time ago, seemed beyond our ability to resolve. Artificial joints are routinely placed in our oldest patients; our fastest-growing group of cardiac catheterization patients are in their 80s; and last year, I referred two 90-year-old patients for aortic valve replacement surgery. (Both patients did well postoperatively, and one even returned to work part-time.) Such technological fixes—often described as “medical miracles”—can, at our discretion, become routine but are extremely expensive. We as a society struggle with justifying this high cost. One possible solution to this quandary is to allow medical care to constitute an ever-increasing percentage of our gross national product. Another option is to improve our efficiency. Both remedies have their place. First and foremost, however, just as cardiac surgery is in many cases prerequisite for restoring healthy function to a human body, the essential and fundamental components of the Beloved Community—justice, equal opportunity, nonviolence, and love of one’s fellows—are prerequisites for building a healthy society.

This article explains how such concepts can help point us in new and exciting directions that greatly inform the ongoing debate about the current crisis in our health care industry.

Salutogenesis, the Study of Wellness

Modern medicine focuses on pathogenesis. Understanding the pathogenic mechanisms leading to...
illness allows us to make monumental advances in preventing and treating disease, but an exclusive focus on pathogenesis may blind us to other, equally important areas of study. Israeli researcher Aaron Antonovsky suggested that we should focus on salutogenesis, the study of wellness and the factors that promote good health. Thus, to better understand wellness, this article discusses some powerful determinants of health—factors that are rarely the focus of either our preventive or our therapeutic efforts.

**Socioeconomic Status and Health Outcome**

A growing body of medical literature shows that most diseases have a gradient of risk that parallels a person’s position in the social hierarchy. The lower the rank, the higher the risk for morbidity and mortality. This association holds for most chronic illnesses, including coronary artery disease, hypertension, diabetes mellitus, and heart failure. The association is weaker but present nonetheless for many types of respiratory disease and cancers.

The data from the Multiple Risk Factor Intervention Trial (MRFIT) study on cardiovascular mortality illustrates this gradient-of-risk effect (Figure 1). Some argue that the gradient is a result of differences in access to health care. However, in the United Kingdom, where everyone has access to the National Health Service, the gradient for cardiovascular mortality is not only present but steep (Figure 2). Studies of British civil servants living in the Whitehall section of London showed that most of the excess mortality does not result from the risk factors (smoking, hypertension, diabetes, and cholesterol) usually targeted in our prevention efforts.

Smoking and hypertension are more common among people with the fewest economic resources. The Whitehall investigators proposed that most of the excess mortality is the pathophysiological consequence of excessive psychosocial stress—stress such as that produced by having relatively low income. Evidence supporting this stress hypothesis can be found in human and animal studies. Only a few of these studies are reviewed here.

**Psychosocial Stress; East-West Mortality Differences**

A revealing study attempted to explain the differences of cardiovascular risk in Swedish and Lithuanian men. In 1978, Lithuanian men had similar rates of cardiovascular mortality as Swedish men but by 1994 had rates of cardiovascular death four times higher. This phenomenon was attributed to improved health in the Swedish population as well as generally deteriorated health among the Lithuanian population. Conventional risk factors did not explain the differences in population health between the two countries. Kristenson et al. found that the Lithuanian men reported more social isolation, job-related strain, and depression than did the Swedish men, a result suggesting that the increased rate of cardiovascular death among the Lithuanian men was socially determined.

In the study, men from each country first had basal cortisol levels measured and then were subjected to experimental stress consisting of mental arithmetic testing, anger recall, and immersion of one hand in ice water. The cortisol response to stress was measured for each group (Figure 3) (see also references 8, 9, 11) and showed that both the low- and high-income Swedish men had a normal stress response: Low basal cortisol levels (before application of experimental stress) rose and fell in response to stress. In contrast, the Lithuanian men showed a highly abnormal stress response: The most prosperous Lithuanians had low basal cortisol levels and a blunted stress response, whereas the low-income Lithuanians had extremely high basal cortisol levels and completely failed to mount a normal stress response. This study, if replicated, could thus show how presumed social stress can have a devastating effect on normal physiologic functioning.

The lack of a normal stress response in these low-income Lithuanian men brings to mind the learned helplessness that occurs in experimental animals repeatedly subjected to uncontrollable, unpredictable stressors. This learned help-
The lower the level of trust between individuals in a given US state, the higher the rate of mortality from all causes.

Psychosocial Stress; Animal Studies
Stanford University neurobiologist-primatologist Robert Sapolsky, who has been studying wild baboons in Kenya for more than 20 years, showed that basal cortisol levels were higher in male subordinate baboons than in their dominant male counterparts. The subordinate baboons also had lower levels of high-density lipoprotein (HDL) cholesterol and a less-robust cardiovascular response to infusion of epinephrine.12,13

One researcher experimentally altered the dominance patterns exhibited by captive macaque monkeys, all of whom were fed an atherogenic diet.14 All monkeys with altered status showed increased atherogenic plaque formation. Compared with monkeys who remained subordinate, monkeys who began as subordinate but became dominant by experimental design had a 44% increase in atherogenic plaque formation.14 Compared with monkeys who remained dominant, monkeys who began as dominant but became subordinate had more than six times the amount of atherogenic plaque formation, suggesting that social incongruity may in itself be stressful.14 Shively and coworkers also showed that without any manipulation of dominance status, dominant monkeys had much less atherosclerosis than did subordinate monkeys and that injection of acetylcholine caused abnormal coronary vasoconstriction in subordinate monkeys but not in dominant monkeys.15

Social Cohesion and Mortality
The Whitehall Studies showed that socioeconomic status is a more powerful predictor of health outcome than are the risk factors we currently address. The study of East-West mortality differences6–11 and the animal studies12–13 mentioned here suggest that lower social rank and social disruption are not only stressful but are accompanied by neurohormonal pathophysiology. To explore the factors contributing to the health of a community, researchers have begun to study social cohesion, ie, the extent to which members of a community form mutually beneficial social ties.

Examination of the relation between social cohesion and health outcome has shown a close relation between civic trust and the rate of mortality from all causes16 (Figure 4).17 The lower the level of trust between individuals in a given US state, the higher the rate of mortality from all causes. A similar relation exists between mortality rates and participation in voluntary organizations. Life expectancy is longest in US states whose populations participate the most in voluntary organizations.

Income Inequality
Modern societies may have no better predictor of health outcome than degree of income equality. Once a country has progressed beyond the epidemiologic transition point where chronic disease replaces infectious disease as the leading cause of death, life expectancy correlates more with income equality than with GNP.5 In Greece, which has a lower GNP than does the United States, life expectancy is longer than in the United States.3 Life expectancy is highest in Sweden and Japan, the countries with the greatest income equality.5

This relation is seen also in US states. States with the greatest income equality have the longest life expectancy as well as the fewest homicides.18 Perhaps income equality is such a powerful health determinant largely because of our long

Figure 3. Serum cortisol responses to a standardized stress test among study populations in Vilnius, Lithuania, and Linköping, Sweden, by income group. Low income: group with lowest 25% of income. High income: group with highest 25% of income.

Reproduced with permission from the publisher, editor, and author from Figure 2.10 in Brunner E, Marmot M. Social organization, stress, and health, published in: Marmot M, Wilkinson RG, editors. Social determinants of health. Oxford (England): Oxford University Press; 1999.20 and adapted from: Kristenson M. Possible causes of the differences in coronary heart disease mortality between Lithuania and Sweden: the LiVicordia Study [dissertation]. Linköping, Sweden: Linköping University; 1998.21 (See also references 8, 9.)
The evolutionary history of living in relatively egalitarian social groupings. We do not appear to be well suited physiologically for great differences in status. The stress of having unequal status appears to be mediated psychologically. The least prosperous group in the Whitehall Study, for example, although having four times higher cardiovascular death risk than in the wealthiest group, were not poor in any real material sense. They all lived in homes and owned cars and television sets.

Recent research on primates has suggested that primates who hunt cooperatively (humans would be included in this category) are “hardwired” for fairness. A recent study in humans shows that our pain center in the anterior cingulate cortex is aroused when we feel socially excluded. Perhaps we become vulnerable to illness when our physiological “hardwiring” for fairness and inclusion is repeatedly contradicted by our social experience. Fairness and inclusiveness are essential elements of the Beloved Community.

Beloved Community Medicine

I have suggested that salutogenesis is a fruitful area for us to explore. Because the studies cited here suggest that human health is largely determined by social factors, understanding these factors and developing health-promoting strategies seem necessary for addressing today’s health care crisis. How can Kawachi’s insights on trust and civic participation be incorporated into our practice? Should we prescribe community service and performance of good deeds as therapy (“mitzvah therapy”) the way some of us have begun prescribing physical activity? What would be the effect of one million Northern California Kaiser Permanente members doing weekly good deeds in their communities with our encouragement and medical sanction? Can we form respectful partnerships with community groups to help make this a reality?

The data linking income equality and health may be the most difficult of all to acknowledge and assimilate. Can these data stimulate us to consider how our purchasing, hiring, and investing decisions can help build the local economies of the communities we serve? Can we adopt salary policies that will be a national model for how a multilayered corporation can reward all its employees fairly? Given that income inequality often leads to abuses of rank, can we be a model corporation that consistently treats all our staff and Health Plan members with dignity and respect?

Research in population medicine requires us to broaden our perspective from preoccupation with individual patients to awareness of entire populations. Salutogenesis requires us to expand our awareness past community medicine to Beloved Community medicine. Embracing these ideas will lead to creative initiatives for addressing the social determinants of health and thus improving health for everyone while limiting the use of expensive allopathic medication and surgery. If we implement this new approach to medical practice, perhaps we will fulfill Dr King’s vision of the Beloved Community. In Dr King’s own words:

“… the end is reconciliation; the end is redemption; the end is the creation of the Beloved Community. It is this type of spirit and this type of love that can transform opposers into friends. It is this type of understanding good will that will transform the deep gloom of the old age into the exuberant gladness of new age. It is this love which will bring about miracles in the hearts of men.”

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Figure 4. State-level correlation of mistrust with age-adjusted mortality rates.

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References

22. Eisler R. The power of partnership; seven relationships that will change your life. Novato, California: New World Library; 2002.

The Final Word

I believe that unarmed truth and unconditional love will have the final word in reality. This is why right, temporarily defeated, is stronger than evil triumphant.