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— HENK VERHOOD

What Is “Sustainable” Health Care?

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Sustainability is part of a trend to consider the whole instead of the specific. Sustainability emphasizes relationships rather than pieces in isolation. Sustainability is about understanding our situation, and developing communities in ways that are equitable, and that make sense ecologically and economically.

— CENTER FOR SUSTAINABLE COMMUNITIES

The recently coined phrase *Ecologically Sustainable Medicine* reflects a growing awareness of the interdependence of human health, environmental health, and health care practices. Professionals learning about ESM often ask about the meaning of the word *sustainability*. The term has many layers of meaning. This article considers modern definitions of sustainability in the context of medical ethics.

The term *sustainability* found its way into our vocabulary in 1980 with the publication of *World Conservation Strategy*¹, and *Building a Sustainable Society*² by Lester Brown, founder and former president of Earthwatch Institute. A simple definition is “achievement of a balance between human impacts and the capacity of the natural world that can be sustained indefinitely, taking into account three interdependent elements: the environment, the economy and the social system.”³

In 1987, the Brundtland Report⁴, as it is now called, was published by the United Nations Commission on Environment and Development. This report is one of the first

to use the term *sustainable development* to describe the potential for humanity to “meet the needs of the present without compromising the ability of future generations to meet their own needs.” The report noted that sustainable development has different meanings and implications in affluent nations than it does in poor nations. Affluent nations must adopt “life-styles within the planet’s ecological means,” to move towards sustainable development. This places a “limit on the present state of technology and social organization on environmental resources.” For poor nations, sustainable development requires “meeting the basic needs of all and extending to all the opportunity to fulfill their aspirations for a better life.” Poverty, due to its instability and the potential it poses for catastrophic degradation of local environments, threatens sustainability. Thus, different socioeconomic issues imply two very different goals for sustainable development. The underlying theme requires “population size and growth in harmony with the changing productive potential of the ecosystem.”



Key to the theory of sustainability is the ability of the ecosystem to maintain functional equilibrium for human populations. Only during the last 40 years have human beings have seriously threatened the stability of the earth's ecosystems. In his article, *A General Statement of the Tragedy of the Commons*,⁵ Herschel Elliott sets forth four premises that lead to the breakdown of ecosystems. These are:

1. The Earth is finite: it has a limited stock of renewable fuels, minerals, and biological resources, a limited throughput of energy from the sun, and a finite sink for processing wastes.
2. Although human activity very often does occur on privately owned lands which are not a commons, that and all other human activities take place in some larger natural commons. And that larger commons is a limited biosystem, which is in a dynamic, competitive, and constantly evolving equilibrium. The equilibrium of an ecosystem can usually accommodate any activity on the part of its members as long as that activity is limited in amount and/or is practiced only by a small population. But continuous growth in the numbers of any organism or in its exploitation of land and resources will eventually exceed the capacity of the ecosystem to sustain that organism.
3. Now, for the first time on a global scale, human beings are exceeding the land and resource use that the Earth's biosystem can sustain.
4. Individuals who seek to maximize their material consumption contribute to the ever-increasing exploitation of the world's commons. But it is also true that all who follow the rarely questioned principles of humanitarian ethics—to save all human

lives, to relieve all human misery, to prevent and cure disease, to foster universal human rights, and to assure equal justice and equal opportunity for everyone—do so also.

The last premise is most troubling for those who practice medicine as well those who seek medical care. It is far easier to blame the loss of the vitality of the environment on selfish individualists maximizing personal wealth; however, it is also true that those dedicated to the elimination of “inequality, injustice and human suffering— all work together to take more land, more water, more fuels and biological resources away from all other living things.” Elliott concludes, “All the principles which presently drive human activity, steadily increase the destructive exploitation of the Earth's biological resources.” A strong argument, and one that finds meaning daily in the practice of medicine.

How, then, should we go about creating sustainability in our present circumstances in which both selfish individualists and self-sacrificing altruists are contributing to ecological devastation? Debra Dadd-Redalia, in her book *Sustaining the Earth*⁶, argues that “sustainability is rooted in looking to the inherent workings of nature as a model, with the idea that the natural systems of the world do work in balance to perpetuate life, and by working in harmony with those natural systems, we can sustain our own lives.” This means the human ‘life-cycle’ is a natural part of the workings of nature. Health care that respects the natural life cycle, which does not seek to quantitatively extend human life at either its inception or its conclusion through the use of expensive technology, will result in healthier populations and greater sustainability. We must understand that by extending the natural life span, a huge strain is placed on society's ability to maintain health for all people.






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Daniel Callahan of the Hastings Institute believes that “medical progress should be understood as improving the quality of health within a finite life cycle in a way that seeks to avoid straining the biological or social or economic capacity of humans to adapt to the progress achieved.”⁷ A sustainable medicine focuses on eliminating diseases that negatively impact the quality of life *within the boundaries of the natural life cycle*, rather than by creating new technologies that extend only the lives of those who can afford it. Callahan cites the Dutch philosopher Henk Verhood who writes, “both in connection with a healthy body and a healthy environment, there is a trust in the ‘healing powers’ of nature itself. The key concept is not control but cooperation with nature.”

We are reminded of Hippocrates, who in his 2500-year-old *Precepts* argues that the physician should “display the discoveries of the art (of medicine), preserving nature, not trying to alter it.” In this very ancient perspective, medicine and healing are a partnership, and by focusing on that partnership society will move closer to sustainable health care. Ecologically Sustainable Medicine is the practice of healing that promotes health of humans and the planet, which are intimately intertwined. ESM practices are modeled on the natural basis of healing found in the way that nature supports healthy ecosystems.

One of the most challenging problems confronting modern biomedicine is its ethical disregard for the potential hazards of overpopulation. Placed in this ethical construct, ESM reinforces individual and societal commitment to live in cooperation with nature. This cooperation is reflected in medical practices guided by the workings of nature, and these practices balance individual health with population and environmental well-being.

Sustainability is fundamental to an Ecologically Sustainable Medicine that supports and respects the global environment. ESM provides a vision of health care extended beyond the mechanical formula of technological biomedicine. Practices of ESM find meaning in a natural way of life and death that supports our ability to preserve the very ecosystems that sustain us. Our future depends on choices that reflect a commitment to sustainability. Ecologically Sustainable Medicine is key to this future. ESM can alter our present health care system to “meet the needs of the present without compromising the ability of future generations to meet their own needs.”⁸ The choice is ours each time we seek medical care. 

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