Virtual Mentor
American Medical Association Journal of Ethics
December 2002, Volume 4, Number 12: 351-380
Taking Responsibility for One's Own Health

Personal Narrative

Upcoming Issues of *Virtual Mentor*

January: Do No Harm: End-of-Life Care
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American Medical Association Journal of Ethics
December 2002, Volume 4, Number 12: 353-354.

FROM THE EDITOR

Commuting with Fear, Traveling with Hope

Audiey Kao, MD, PhD

Running to the window, he opened it, and put out his head. No fog, no mist; clear, bright, jovial, stirring, cold; cold, piping for the blood to dance to; Golden sunlight; Heavenly sky; sweet fresh air; merry bells. Oh, glorious! Glorious!

"What's to-day?" cried Scrooge, calling downward to a boy in Sunday clothes, who perhaps had loitered in to look about him.

"Eh?" returned the boy, with all his might of wonder.

"What's to-day, my fine fellow?" said Scrooge.

"To-day?" replied the boy. "Why, Christmas Day."

"*It's Christmas Day," said Scrooge to himself. "I haven't missed it. The Spirits have done it all in one night. They can do anything they like. Of course they can. Of course they can."*

In keeping with the efficiency of Ebeneezer Scrooge's personal and spiritual transformation, Charles Dickens began writing his *Little Carol* in October of 1843, finishing it by the end of November in time to be published for the holidays. The best known of Dickens' books, *A Christmas Carol* has come to symbolize the power of experiential understanding and reflection in shaping how we see ourselves and, in turn, how we relate to our fellow humans, especially those who are vulnerable and less fortunate. In the case of Bob Cratchit, Scrooge finally realized the importance of providing his employee and family with "health insurance benefits." Fortunately, Scrooge rediscovered his empathy and compassion in time for Cratchit's son, Tiny Tim, to get the medical care he desperately needed but that his father could not afford.

As physicians, we are expected to treat our patients with empathy and compassion. Like Scrooge, we possess experiences, inside and outside our professional lives that can remind us of these importance attributes of good doctoring. Unlike Scrooge, however, we do not have the benefit of transformative "slumber parties" in which to reflect on our experiences and change overnight from what we are to what we should be.

Scrooge had more than 1 response to the scene revealed to him by the Ghost of Christmas Future. He feared that Future—the lonely death of an unloved man; Tiny Tim long since dead due to lack of needed medical care. Besides his fear, though, Scrooge experienced the desire and willingness to change the future he feared; he had hope.

To renew our spirit and commitment to empathic and compassionate care, physicians, like Scrooge, may need the occasional experience or remembrance of fear. We are more comfortable, of course, with hope. Prolonging hope in others is part of our business. Hope is the more desirable travel companion in life for the simple reason that we prefer feeling upbeat, looking forward to the future rather than dreading it. But to provide empathetic and compassionate care, we may need occasionally to commute with fear.

The capacity for empathic and compassionate care depends on our ability to understand and appreciate the experience of another and on our willingness to share and participate in their experiencing. To do this, we need to reflect both on times when we have felt hopeful and confident and, maybe more importantly, on times when we have experienced fear and anxiety. Remember when, as medical students we feared we were afflicted with the disease du jour? Remember, even more forcefully and poignantly, having been ill and, due perhaps to our medical knowledge, fearing the worst?

Few prefer to commute with fear and anxiety. But physicians who want to practice empathic medicine should regularly reflect on these uncomfortable emotions because doing so may recall them more potently to the human experience of their patients. Scrooge, some would argue, may not have changed his ways but for the fear instilled by his vision of Christmas Future. We may wish we could be transformed once and for all into compassionate physicians; that "The Spirits [could do] it all in one night." Unfortunately such transformations are (with few exceptions) the stuff of fiction. Professing medicine in an every day, every night rededicating, week in and week out; commuting regularly with fear as well as traveling with hope.

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Virtual Mentor
American Medical Association Journal of Ethics
December 2002, Volume 4, Number 12: 355-356.

CASE AND COMMENTARY
Loss of Frozen Embryos
Commentary by Linda MacDonald Glenn, LLM

Case
Mr. and Mrs. Donald Smith underwent fertility treatments and subsequent in vitro fertilization at a clinic that offered assisted reproduction technology. The in vitro fertilization consisted of harvesting Mrs. Smith's eggs, fertilizing them with her husband's sperm, implanting some of the resulting embryos for gestation, and freezing the others for future use, if necessary. Four embryos were implanted and 9 were frozen.

The first attempt did not result in a pregnancy. A year and a half later, when Mr. and Mrs. Smith returned to the clinic to prepare for a second attempt, they were informed that the frozen embryos had been inadvertently lost when the clinic relocated the year before. The Smiths were shown the "Informed Consent and Contract for Embryo Freezing" which they had signed before the prior treatment. The forms stated, in part, that "a laboratory accident in the Clinic may result in the loss or damage to one or more of said frozen embryos." Nevertheless, the Smiths brought suit against the clinic for the loss and destruction of their embryos, the loss of their "potential children," and emotional harm.

Questions for Discussion
1. Does the "lab accident" clause release the clinic from liability for the loss of the Smith's embryos?
2. If the clinic is liable for the loss, should it be liable for loss of "property" or something more? If Mrs. Smith had been carrying a viable fetus, and someone caused the death of the fetus, that person could be charged with the "wrongful death" of the fetus. Are the embryos "victims" of wrongful death in the same way the viable fetus would have been?
3. Are embryos so distinctive a form of life as to need specific legislation that applies only to embryos?

Subsequent Legal Proceedings
This scenario is based in part on a case brought in Rhode Island in 1995. A Superior Court issued a decision this past summer that frozen embryos were not "persons" within the meaning of the wrongful death statute and therefore could not be considered "victims" or "potential children." The court did not permit the plaintiffs to seek compensation for negligent infliction of emotional distress because the

plaintiffs (1) did not witness the actual loss or destruction of the embryos, and (2) they did not suffer any physical manifestation of the emotional distress.

The Court, however, did hold that the frozen embryos were a form of "irreplaceable" property and allowed the plaintiffs to proceed with a claim for loss of "unique property." Despite the "informed consent" document, the Court found that there remained a question of fact as to whether or not the plaintiffs were truly informed, that is, whether they fully understood "the possible risk associated with the loss or destruction of their pre-embryos." This aspect of the case has been remanded to the trial court and parties for further discovery and is still pending.

The issue of frozen embryo loss has yet to be addressed statutorily; to date, state courts have relied on case law. Interestingly, a recently adopted federal regulation in the Health and Human Services Department extends the definition of "child" to include fetuses and embryos so that they can be covered under HHS's State Children's Health Insurance Program (SCHIP). The extended definition would allow prenatal care to be reimbursed under SCHIP. No lawsuit has yet been filed claiming that this "expanded" definition applies to other areas of the law, but such action should be expected sooner rather than later. Legislation regarding the liability of IVF clinics in general has been proposed by the bioethics community, but has not yet been enacted.[1]

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The people and events in this case are fictional. Resemblance to real events or to names of people, living or dead, is entirely coincidental. The viewpoints expressed on this site are those of the authors and do not necessarily reflect the views and policies of the AMA.

Virtual Mentor
American Medical Association Journal of Ethics
December 2002, Volume 4, Number 12: 357-360.

IN THE LITERATURE

Putting (Insurance) Consumers in Charge of Health Care

Faith Lagay, PhD

Any and all potential solutions to the broken health care financing system in the US are welcome. O'Connor Health Care Communications is offering a $10,000 first prize in its national essay contest that challenges entrants to "Build an American Health System."[1] Winners will be announced in October 2003. Let's hope the contest produces a workable resolution that will make quality medical care available to all Americans, will properly compensate physicians for their knowledge and skill, and won't put hospitals with needed beds out of business—all at a cost that Americans, their insurers, their benefit-providing employers, and government entities that pay for the uninsured can afford.

In the meantime, Regina Herzlinger tackles one aspect of the troubled system—employer-provided health insurance—in a July 2002 article for *Harvard Business Review* entitled "Let's Put Consumers in Charge of Health Care."[2] Evidence abounds that the system is not working for businesses and their employees. Herzlinger mentions that companies' costs for providing health benefits to their employees rose by 3 times the rate of inflation between 2000 and 2001.[3] For all that, employees were not happy with what they received—minimal variation in types of coverage, gaps in coverage for prescriptions and long-term care, and burdensome out-of-pocket expenses. "No one's happy," Herzlinger says. "Not the insurers, not the patients, not the doctors and nurses, not the hospitals, and certainly not the companies that are footing the bill.[4]

Herzlinger offers the solution stated in her title—putting consumers in charge of health care. The title is a little misleading; the consumers Herzlinger refers to are the purchasers of health *insuranc*e, not the consumers of health *care*. As first holder of the Nancy R. McPherson Professor of Business Administration Chair at the Harvard Business School, Regina Herzlinger analyzes the system from a business perspective and offers a fix for companies that are currently squeezed between rising costs of health insurance plans and the pressure to offer employees competitive benefits packages. The uninsured—both employed and unemployed—that many health care reformers worry about are not Herzlinger's immediate concern. She explains that repairing the break between the employer and insurance companies will force changes in the delivery of health services that will reduce prices, increase productivity, improve quality, and expand choices for everyone. That's what happens, Herzlinger says, "[w]hen consumers apply pressure on an industry."[5]

The benefits that insurance consumers will see under Herzlinger's proposed plan will be chiefly in the form of greater choice of coverage options and more complete information to use in making those choices. Cost for coverage is unlikely to decrease, and those with serious and chronic illness will use more of their insurance allowance than others.

Under Herzlinger's 6-point proposal, employees receive a defined contribution from their employer, or are allowed to use their own pretax dollars for coverage, or both. They are presented with a broad range of plan options that include various: (1) types of benefits (long-term care, preventive care, prescriptions), 2) out-of-pocket maximums (employees will be able to exchange higher maximums for lower premiums), (3) term lengths (multi-year plans that give insurers incentive to promote long-term health), and (4) provider types (from individual physicians to integrated health care teams). Employees also receive information about the plans—how they have been rated by other consumers —and how the doctors and hospitals have been rated by other patients.

With this information employees choose what benefits to buy with the company's benefit allowance and their own dollars. Healthy employees can choose minimum coverage (everyone, in fact, must take at *least* minimum coverage) and pocket the remainder of the allowance. Whereas, today, most businesses subsidize plans at different levels to encourage employees to choose certain plans over others, under Herzlinger's proposal, employees will see the actual cost and services offered by different levels of benefits and will pay for what they expect to use. Employees with greater health needs will buy more coverage and use more of their pretax dollars to do so. Why wouldn't they? Anything not covered by the premiums will come out of the employee's pocket and, hence, out of after-tax dollars. Herzlinger's point is that when employees see real costs and are given their own money to buy with, they will shop prudently. Employer's payments to the insurer will remain the same because higher premiums for some employees are offset by lower premiums for healthier employees.

Finally, providers (by which Herzlinger means physicians, hospitals, diagnostic clinics, and other services) set their own prices, both for discrete episodes of care and for integrated bundles of related services.

The author believes that these changes, this "wave of creativity," will bring about nothing less than a revolution in health care.[6] Specifically, she says, health care providers will respond to the pressure of consumer choices and demands with 3 sorts of improvements. Herzlinger refers to the first of these innovations as the formation of *focused factories*. (Physicians who object to the term "providers," and many do, will probably not be pleased with this factory metaphor, but Herzlinger likes it because she believes it's the people who actually do the work—those on the factory floor—who figure how to improve the production.)[7] The focused factories will comprise groups of specialist physicians, nutritionists, nurses, social workers, whatever it takes to provide complete, focused care for certain diseases and patient

populations, people with diabetes, for example. The "factory" focused on diabetes would have endocrinologists, cardiologists, nephrologists, dermatologists, and podiatrists, among other specialists. Focused factories will supplant the current vertically integrated organizations of physician, hospital, and insurer that are meeting with financial disaster. Patients will pay less for focused care than they currently pay for the many discrete services necessary to treat their complex, chronic illnesses.

The second innovation will be integrated information records, which consumers will demand so that care can be seamless and that information about adverse drug reactions, or simply the list of all medications a person is taking, will be available to all providers at all times.

The third revolutionary change is personalized medicine—the fruits of research in pharmacogenomics that will allow drug treatments to be tailored to each patient's genetic make-up.

Herzlinger trusts in the ability of well-informed, highly-motivated consumers to make reasoned decisions. She believes, further, that these consumers, "shopping responsibly" will affect the market.[8] Relying on a market model of health care delivery and payment, Herzlinger preserves the risk-analysis system of insurance underwriting. Some health care reformers and many bioethicists will find her approach inadequate to the needs of vulnerable populations—the unemployed or employed who don't have employer-supplied insurance; those with disabling conditions, or those whose families' health needs would eat into their pretax incomes. Moreover, risk-analysis underwriting penalizes individuals for their health deficits; community rating, on the other hand, distributes the burden equally, asking the healthier to subsidize the less healthy.

For the many who have been saying all along that health care financing won't change until those who are well covered and paying for their coverage feel the pinch, that time has come, and Herzlinger provides a 6-step program she thinks will ease the pinch. Moreover, it is a plan that she believes will put pressure on the providers and insurers to revolutionize the delivery and financing of health care. Herzlinger is certainly correct in saying that paying customers usually get what they want, so there is good reason to give her proposal thoughtful consideration—as long as someone is looking out for those who aren't equal players in the market.

Questions for Discussion

1. Herzlinger's plan for remodeling the health insurance system preserves the risk-rating system with different coverage cost for healthy and less healthy consumers. This "actuarial fairness" model differs from the community-rating approach where, in effect, the costs of all projected needs are added, the sum is divided by the number of those covered, and everyone pays the average cost. Which system do you think is a better approach to paying for the health care of insured Americans? And the uninsured?

2. Herzlinger states with confidence that the changes she proposes to employer-supplied health insurance will bring about revolutionary changes in the services physicians offer and the way they offer them, eg, combining various types of services to treat complex, chronic illnesses. Do you think the changes Herzlinger proposes in health care financing will necessarily bring about changes in health care services and delivery? How or why will this happen?
3. In explaining what is wrong with the current health insurance system, Herzlinger tells the story of Duke University hospital's integrated program for treating congestive heart failure. The program was immensely successful; treatment costs declined and so did hospital admissions. Unfortunately, the decline in hospital admissions caused Duke University hospital to lose revenue, so there was little incentive to continue or replicate the successful treatment program. How will hospitals fare under Herzlinger's recommended *focused factory* development? How will they make up for fewer admission and acute interventions such as surgery?

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Virtual Mentor
American Medical Association Journal of Ethics
December 2002, Volume 4, Number 12: 361-362.

AMA CODE SAYS

CEJA to Present Three Reports with Recommendations to House of Delegates

Audiey Kao, MD, PhD

At the heart of the AMA *Code of Medical Ethics* revision process is the work of the Council on Ethical and Judicial Affair's (CEJA) nine members and its staff. First, CEJA determines that a topic of ethical or professional concern warrants a policy statement from the AMA. The suggestion for a policy statement may come from AMA delegates in an open forum or as a resolution from the House of Delegates; it may be the result of letters or inquiries CEJA has received from physicians; or it may arise from CEJA's close monitoring of professional journals and media reports. Having determined the need for an AMA policy, CEJA staff research the topic thoroughly and prepare a comprehensive report complete with recommendations. When the council has arrived at a consensus on the report's content and recommendations, CEJA presents the report to a House of Delegates reference committee, which in turn reports to the House, recommending that the CEJA report be adopted, not adopted, or referred, that is, returned to CEJA for revision. When a report is adopted, its recommendations are formatted as an Opinion that is filed at the next House of Delegates meeting and then included in the AMA *Cod*e.

At the AMA House of Delegates Interim meeting in December 2002, CEJA will present three reports to the House by way of reference committees.

Report 1-I-02, "Special Physician-Patient Contracts – Contracting for Exclusive Personalized Services," considers an emerging trend sometimes called "boutique care." Under specialized contracts, physicians offer exclusive personalized services and amenities to patients who pay additional, usually annual, fees distinct from the cost of medical care. Personalized service may mean that the patient need not wait with other patients to see the physician, or that the physician will accompany the patient to see a specialist or will make a home visit if necessary. The CEJA report recommends that both parties to such contracts be clear about the terms of the relationship and agree to them and that such contracts not be promoted as a promise for higher quality of technical care, but as a means to provide more personalized service. The recommendations note that the impact of such special contracts on access to care within a community should be considered, so that physicians may be precluded from establishing special contracts in locations where physicians are scarce.

Report 2-I-02, "Ethical Responsibility to Study and Prevent Error and Harm in the Provision of Health Care," explores the ethical responsibilities mentioned in its title

and also physicians' responsibilities to patients who suffer harm as a result of a medical error. The recommendations call on physicians to participate in the development of reporting mechanisms that emphasize learning and systems changes. The report offers guidance in dealing with patients who have been harmed, with emphasis on honesty, continuity of care, and patient advocacy. Finally, the report encourages physicians to seek changes in the current legal system to ensure that all medical errors can be safely and securely reported and studied as learning experiences for all participants in the health care system, without threat of legal liability or punitive action.

Report 3-I-02, "Ethical Guidelines for the Use of Electronic Mail between Patients and Physicians," examines the ethical implications of electronic communication (e-mail) between physicians and patients, its impact on a previously established patient-physician relationship, and the limitations in using e-mail to create a new patient-physician relationship. The report recommends that e-mail should not be used to establish a patient-physician relationship but can supplement office visits in established relationships. The report states that physicians must hold the same ethical responsibilities to their patients when using e-mail as they do during other patient encounters.

House of Delegates decision on the three CEJA reports is expected by mid-December.

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Virtual Mentor
American Medical Association Journal of Ethics
December 2002, Volume 4, Number 12: 363-366.

MEDICAL EDUCATION

Physicians as Agents of the State

Jeremy Spevick

During the first 30 years of the 20th century, the concept of "racial hygiene" slowly infiltrated the German medical psyche. The eugenic belief that the Aryan race (ie, Germans) could and should be "purified" by ridding itself of weak individuals set the stage for the actions of doctors during the Holocaust. Acting as agents of the state, German physicians participated in forced sterilizations, euthanasia, murders, and torturing experiments on human subjects without their consent.

The moral blindspots of German doctors during the Holocaust can be traced to the profession's increasing commitment to the goals of the state. Among the activities devised by the Third Reich to improve the German race and carried out by its physicians were sterilization of close to 360,000 individuals, management of clinics which tested individuals for racial acceptability prior to marriage, and implementing and executing Operation T-4, the goal of which was to kill people who were thought to be of no use to society.[1] As part of Operation T-4, doctors were required to register any child born with congenital deformities. Registered children were then "reviewed" by a committee of physicians to determine who should be exterminated.

In the aftermath of these horrific events, human rights groups around the world sought to implement guidelines for medical research that would prevent a repetition of these human rights violations. One of the earliest documents to emerge was the Nuremberg Code for the protection of human beings in scientific research. The Code, like others that followed such as the Belmont Report of 1979, states that all potential research subjects must give their informed consent before becoming enrolled in a study. We would like to believe that these guidelines and our enlightenment will safeguard humanity from encountering the nightmares of Nazi research again. Several authors, however, argue that given the right combination of biomedical, economic, political, and ideological circumstances, similar atrocities could happen again.

One author who subscribes to this school of thought is physician Joel Martin Geiderman. In the March 2002 issue of *Academic Emergency Medicine*, Geiderman examines the moral temper of the medical establishment in Nazi Germany and analyzes it in relationship to current issues in medicine.[2] Geiderman stresses that he is not equating any current medical practices to those performed during the Holocaust, for such a comparison could easily trivialize the events of the past. Yet

he does believe that an understanding of the factors that led German physicians to compromise the profession's core values holds valuable lessons for today's society. Geiderman highlights several present-day practices which suggest that the medical profession is still not entirely independent of the state's coercion. He hopes that promoting awareness and discussion of these practices can stop the medical profession from proceeding down a slippery slope to unacceptable behaviors.

One of the most obvious examples of physicians acting as agents of the state that Geiderman discusses is their participation in lethal injections. Although it is never stated explicitly in state statutes, physicians play a significant role in the administration of lethal injections to death row prisoners. According to the AMA's *Code of Medical Ethics*, a doctor "should not be a participant in a legally authorized execution."[3] The *Code* permits doctors to *certify* death, but not to inject lethal drugs, monitor vital signs, select intravenous sites, or even to *pronounce* death. Of the 38 states with the death penalty, 36 have statutes requiring the presence of a physician.[4] If one looks beyond the statutes to the regulations put forth by the departments of correction within each state, there are explicit instructions outlining the doctor's role in the execution. In Texas, for example, the Department of Corrections states that, "A medically trained individual (not to be identified) shall insert an intravenous catheter into the condemned person's arm and cause a neutral saline solution to flow."[5] The participation of doctors in executions is not surprising considering a recent survey of 1000 doctors that found the majority of physicians were unaware of any prohibition against their participation in executions. Only 3 percent of respondents knew that guidelines existed on the subject.[6]

Those who argue for physician involvement in lethal injection claim that without physician participation, the Eighth Amendment freedom from cruel and unusual punishment could be violated. It is in the prisoner's best interest that doctors be involved with starting intravenous lines, setting up intravenous infusion sites, and measuring out and administering the appropriate drugs so that the execution proceeds as painlessly as possible.[7] As long as society permits capital punishment, some will make this ethical argument. Physicians who accept the argument and participate to protect the prisoner's best interest must be aware that, in taking the life of a healthy person at the command of the state, their actions conflict with the goals of medicine.

A second practice that Geiderman examines is our society's mandatory reporting laws that require physicians to inform law enforcement or health departments of "patients with certain medical conditions or with injuries known or suspected to have been sustained by nefarious mechanisms."[8] These laws cover a wide range of conditions from patients with infectious diseases to victims of sexual, domestic, and child abuse. Failure to comply with these laws can result in criminal and/or civil charges against the physician.

The rationale for mandatory reporting is that, in certain situations, the protection of other members of society can override the interests of the individual patient. Many

patients may not want their injuries reported. In these situations, the state requires the physician to put its interest before those of the patient. Geiderman is not saying the practice of mandatory reporting should be abandoned, but, again, he urges physicians to take "careful consideration of the possible consequences" before breaking patient confidentiality.[9]

Though not mentioned by Geiderman, a recently proposed practice to test smallpox vaccine on children may again put society's interest in conflict with the individual patient/research subject. In early November 2002, responding to requests by President Bush, researchers from UCLA and Cincinnati Children's Hospital announced their intentions to look at the effects of a smallpox vaccine on preschoolers. The vaccine would protect the children in the event of a bioterrorist attack, but could also cause life-threatening reactions in the recipients or in others who come into contact with them. The benefits of smallpox vaccination are largely societal; testing will determine the proper dosage for future use. This research proposal asks doctors to choose between what is best for an individual (receiving the vaccination after the proper dosage is known and only in response to a known threat) and what is best for society. Choices such as this could become more frequent and difficult as the government promotes its war on terror and seeks to find safeguards to protect Americans.

When doctors act as agents of the state, there is clearly a wide range of activities from acceptable to questionable to unacceptable. While the so-called "mercy killings" during the Holocaust certainly fall at the latter end of the spectrum, giving established vaccines to children who must receive them before entering school is acceptable. By looking at some current practices from a historical perspective, Geiderman raises awareness of how the profession can approach and cross the line of acceptability.

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Virtual Mentor
American Medical Association Journal of Ethics
December 2002, Volume 4, Number 12: 367-369.

MEDICAL EDUCATION

Living Dangerously by Choice

Susanna Smith

Dr. Gro Harlem Brundtland, director-general of the World Health Organization (WHO), has handed down an ominous warning: "the world is living dangerously, either because it has little choice or because it is making the wrong choices about consumption and activity."[1]

With this warning came a list of the top 10 threats to health worldwide and a plea for decisive governmental action.

The top 10 threats to health are:

1. underweight
2. unsafe sex
3. high blood pressure
4. tobacco consumption
5. alcohol consumption
6. unsafe water, sanitation, and hygiene
7. iron deficiency
8. indoor smoke from solid fuels
9. high cholesterol
10. obesity

And the plea goes something like this: "Harness the forces of globalization to reduce inequity, to diminish hunger, and to improve health in a more just and inclusive global society."[1] Notice that from a policy standpoint, reducing the risks to health on this list requires equitable distribution of the world's resources *before* medical intervention.

The WHO is calling for government action and large-scale reforms such as higher taxes on tobacco, population-wide educational campaigns on obesity and cholesterol, and AIDS education in schools.[1] They ask governments and other organizations to pursue "preventing the actual causes of important diseases as well as treating the diseases themselves."[2] Some of the WHO's recommendations such as reducing salt content in processed foods have been met with support. The American Public Health Association (APHA) recently came out in favor of this action, saying it could save 150,000 lives a year currently lost due to strokes, heart attacks, and other illnesses linked to high blood pressure.[3] The Institute of Medicine (IOM)

wants increased spending on public health and public health education. It is pushing for all medical students to receive basic public health and preventive medicine training.[4] But what the WHO, the IOM, and the APHA are all advocating for, though from different angles, is preventive medicine. The medical community needs to adopt a new approach to achieving patient wellness.

Now look at the list again. There is a sad irony which this lists highlights, the "gap between the haves and have-nots."[1] But the WHO "haves" and "have-nots" are not the traditional wealthy and poor. This report splits the world into those who have no health choices, and those who have choices about their health and make the wrong ones. Most people in the United States fall into the latter category.

So what wrong choices are we Americans making?
Too much alcohol; too much tabacco.
High blood pressure, high cholesterol.
Obesity.

Do these suggest greed?
Sloth?
Gluttony?

All Americans, citizens of an economic superpower though they may be, need to do some serious rethinking about their lifestyles. Among industrialized nations the United States spends the highest percentage of its gross national product on health care, and yet the WHO ranks the US system 37th in an assessment of global health systems.[5] As much as 95 percent of US spending on health care goes toward biomedical research and medical care[5] while as little as 1 to 2 percent is spent on preventive medicine.[4]

There is no question that government reforms, public campaigns, and an overhaul of the public health system would go a long way toward eliminating health risks, but it might take a long time. Making preventive medicine a priority doesn't have to mean political red tape and lobbying; there is a grassroots approach. It can start with each doctor treating his or her own population of patients with preventive medicine in mind. Patient education before serious health conditions arise is a good starting point. It means discussing a reasonable postpartum weight-loss program with your patient who is in her third trimester of pregnancy; talking to your recently divorced, middle-aged patient about healthy stress relief and a low-salt diet before his blood pressure skyrockets. It means recounting the dangers of smoking and the monetary savings of quitting to your smoker-patients rather than just checking the box marked, "Smoker, Yes." It means standing on your soapbox of healthy living with all your patients.

The WHO's plea to governments around the world "to take bold and determined actions against a relatively few major risks to health, in the knowledge that the likely result within the next 10 years will be large gains in healthy life expectancy

of their citizens," is a challenge that can be taken up by all practicing doctors in the interest of the health of their patients. But it is more than a challenge to improve the health of your patients, it is a challenge to the doctors' way of thinking. To practice preventative medicine, physicians have to give up the historically and culturally grounded view of the profession as healers of disease and adopt a view of their jobs as preservers of health. For both physicians and patients this means taking a proactive interest in their health rather responding reactively to illness.

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Virtual Mentor
American Medical Association Journal of Ethics
December 2002, Volume 4, Number 12: 370-371.

VIEWPOINT

The Twelve Days of Christmas

Audiey Kao, MD, PhD

On the first day of Christmas, my drug rep gave to me a partridge in a pear tree.

On the second day of Christmas, my drug rep gave to me, 2 ballpoint pens and a partridge in a pear tree.

On the third day of Christmas, my drug rep gave to me, 3 handy penlights, 2 ballpoint pens, and a partridge in a pear tree.

On the fourth day of Christmas, my drug rep gave to me, a 4-volume textbook, 3 handy penlights, 2 ballpoint pens, and a partridge in a pear tree.

On the fifth day of Christmas, my drug rep gave to me, a 5-lb ham, a 4-volume textbook, 3 handy penlights, 2 ballpoint pens, and a partridge in a pear tree.

On the sixth day of Christmas, my drug rep gave to me, 6 baseball tickets, a 5-lb ham, a 4-volume textbook, 3 handy penlights, 2 ballpoint pens, and a partridge in a pear tree.

On the seventh day of Christmas, my drug rep gave to me, a 7-course meal, 6 baseball tickets, a 5-lb ham, a 4-volume textbook, 3 handy penlights, 2 ballpoint pens, and a partridge in a pear tree.

On the eighth day of Christmas, my drug rep gave to me, 8 gift certificates, a 7-course meal, 6 baseball tickets, a 5-lb ham, a 4-volume textbook, 3 handy penlights, 2 ballpoint pens, and a partridge in a pear tree.

On the ninth day of Christmas, my drug rep gave to me, 9 holes of golf, 8 gift certificates, a 7-course meal, 6 baseball tickets, a 5-lb ham, a 4-volume textbook, 3 handy penlights, 2 ballpoint pens, and a partridge in a pear tree.

On the tenth day of Christmas, my drug rep gave to me, 10 movie tickets, 9 holes of golf, 8 gift certificates, a 7-course meal, 6 baseball tickets, a 5-lb ham, a 4-volume textbook, 3 handy penlights, 2 ballpoint pens, and a partridge in a pear tree.

On the eleventh day of Christmas, my drug rep gave to me, 11 oz of caviar, 10 movie tickets, 9 holes of golf, 8 gift certificates, a 7-course meal, 6 baseball tickets,

a 5-lb ham, a 4-volume textbook, 3 handy penlights, 2 ballpoint pens, and a partridge in a pear tree.

On the twelfth day of Christmas, my drug rep gave to me, 12 long-stemmed roses, 11 oz of caviar, 10 movie tickets, 9 holes of golf, 8 gift certificates, a 7-course meal, 6 baseball tickets, a 5-lb ham, a 4-volume textbook, 3 handy penlights, 2 ballpoint pens, and a partridge in a pear tree.

Audiey Kao, MD, PhD is the editor in chief of *Virtual Mentor*.

Virtual Mentor
American Medical Association Journal of Ethics
December 2002, Volume 4, Number 12: 372-374.

VIEWPOINT

Revolutionizing House Calls: Home Health Care Technology

Michelle Lim

The Japanese engineers of Matsushita Electric, the parent company of Panasonic, recently launched a prototype series of home health care devices that will give new meaning to the term "house calls." Set to enter the market in 2005, these devices will add to the collection of technologies that have already begun to revolutionize the practice of medicine by altering how and where health care is delivered. For instance, home health care devices already enable diabetic patients to monitor their glucose levels regularly and adjust their insulin dosages, while patients with pacemakers use equipment to transmit electrocardiographic information over the telephone lines to their physician's offices. These devices allow physicians of chronically ill and disabled patients to manage their care in the convenience of the patients' homes and communities.

When one thinks about medical care, however, bathroom fixtures do not immediately come to mind. Take the mundane toilet, for example. Matsushita has added a variety of features to the traditional porcelain bowl, one of which is a health-monitoring seat that measures weight and body-fat ratio. It can also check heartbeat, blood pressure, and glucose levels. The results are automatically sent to the patient's doctor via the Internet, enabling him or her to monitor the patient's physical well-being. At the same time, patients can keep track of their data in the medical records stored in their home network server.[1]

Another unique medical innovation is the Matsushita bathroom mirror. Equipped with sensors that take infrared pictures of one's hair and skin, the mirror then makes treatment recommendations for any hair and skin problems. The "mirror" records the diagnosis in its data banks and dispenses mineral waters in varying degrees of acidity to best suit one's needs.[2]

A third new product is the tele-homecare system, which allows patients to receive medical check-ups at home. The system, which has a videophone component for patient-physician consultations, enables patients to send general health data, such as vital signs, to their doctor's terminal. They can also order and receive screening tests, such as electrocardiograms, at their doctor's request.

These health care innovations appeal to the consumer's desire for convenience and peace-of-mind. No more inconvenient trips to the doctor's office, waiting for appointments, or worrisome days until lab results return. The peace-of-mind comes

from knowing that a doctor is monitoring one's daily health status and will be able to detect early signs of disease.[1] Patients can track their own health status in monthly reports that summarizes their daily conditions.[3]

Storing medical records in electronic data banks not only makes them more accessible to one's primary physician but also facilitates efficient exchange of medical information among groups of doctors. Electronic medical records reduce paperwork and relieve clogged phone lines.[4] Through elaborate security systems, e-records may be even more secure than paper records. Access to electronic records can be monitored, while paper records can be stolen, faxed, or copied without leaving a trace.[5]

These devices in no way replace the roles of the doctor as a caregiver and diagnostician. On the contrary, physicians have more data from which to observe patterns and trends in their patients' health status that may lead to unwanted conditions. With these data, physicians can be better prepared for patient visits, making better use of the time spent with the patient. With concrete data at hand, physicians will have a far better idea of what a patient means by, "Doc, I haven't been feeling well lately."

According to the World Medical Association, the goal behind home medical monitoring technologies is to provide the best medical care for the chronically ill and disabled population, while "maintaining their independence and maximum level of function in their homes and communities."[1] By facilitating a constant stream of information between the patient's home to the doctor's office, Matsushita's health-monitoring devices will help accomplish that goal.

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Virtual Mentor
American Medical Association Journal of Ethics
December 2002, Volume 4, Number 12: 275-277.

PERSONAL NARRATIVE

Through the Physician's Eyes: Effects of Gastric Bypass Surgery on Comorbid Conditions

Jeanette Newton Keith, MD

Media coverage of singer Carnie Wilson's gastric bypass surgery has brought the topic to the attention of many and probably will prompt a surge of requests for the procedure. It is reasonable to assume that not all who respond to ads offering the surgery or request it from a surgeon will be suitable candidates. We asked 2 physicians who specialize in treating patients with obesity to discuss the topic, addressing specifically how they determine patient eligibility for the surgery and what its risks and benefits are.

Gastric bypass surgery is an effective weight loss modality for carefully selected individuals, but the benefits should be cautiously weighed against the risks, given the 10 to 20 percent morbidity and 1-2 percent mortality rates in the best surgical hands. We reserve gastric bypass for those individuals with a body mass index (BMI) 3 35 with 2 or more obesity-related complications or a body mass index 3 40 who have failed conservative therapy.

The options of medical, pharmacologic, and surgical therapies for weight management are discussed with every patient in our weight management program. A 5 to 10 percent weight reduction that's been shown to reduce disease risks and complications is the definition of a successful outcome. Dietary interventions are designed to meet the needs and lifestyles of the person seeking realistic interventions for lasting changes. We use food logs, daily exercise, modest caloric restriction and goal setting as the foundation for our program. Indirect calorimetry is also obtained and used to identify those persons with a low resting energy metabolism that increases the necessity of using pharmacologic or surgical interventions. The evolving doctor-patient and dietitian-patient relationships allow for assessment of the psychological readiness for weight reduction efforts and for the identification of psychological problems such as uncontrolled depression, borderline personality, and so on that are contraindications to gastric bypass surgery.

I'll share a case with you. "Mrs. Sanchez" came for assistance with weight reduction when she was 52. She had been thin as a child and maintained a usual adult weight of 127 pounds at a height of 5'2" tall (62 inches, 2.46-meters squared) until her fourth pregnancy at age 32 years. After the birth of her fourth child, she weighed 159 pounds, which she was able to maintain until her fifth pregnancy at age 36

years. Due to depression, she gained weight, reaching her then maximum weight of 270 pounds. At age 46 years, she participated in Weight Watchers, achieving an 80-pound weight loss in 1 year. She was able to hold her weight at 190 pounds for 3 years in the maintenance phase program.

She began to eat out of frustration when she developed early menopausal symptoms at 51. She became unable to exercise due to bilateral arthritis of the knees and was found to have obstructive sleep apnea. Despite exercise, monitoring her caloric intake, and a trial of Orlistat, Mrs. Sanchez failed to lose significant weight. When referred to our weight management program, she weighed 280 pounds (127.2 kg).

Her past medical history included childhood asthma, arthritis, and obstructive sleep apnea. She had a history of twenty-pack-per-year tobacco use. She is an only child, and neither parent is obese. Twenty-four hour dietary recall revealed that Mrs. Sanchez had eaten a small yogurt with fruit for breakfast. For lunch, she had a small salad with regular dressing and a four-ounce baked chicken breast. For dinner, she had 6 ounces of pork roast, green beans, and corn. She participated in a water aerobics class 3 nights a week and was taking the herbal supplement, glucosamine chondroitin. Her review of systems was essentially negative.

On physical exam, Mrs. Sanchez' blood pressure was 120/70; her pulse was 82; she had a respiratory rate of 18; her temperature was 35.9. Her BMI was 51.7. Mrs. Sanchez had central obesity, acanthosis nigricans, and a neck circumference >17 inches but had an otherwise normal examination. Her lab results were normal.

Mrs. Sanchez experienced a very slow weight loss at a rate of less than 1 pound per week despite dietary compliance and exercise. Under reporting of calories may have contributed to her poor response. Indirect calorimetry confirmed the presence of a very low resting energy metabolism. Mrs. Sanchez was evaluated for surgery, completed the evaluation process, and was approved for the Roux-en-Y gastric bypass procedure. An anastomotic leak, intra-abdominal abscess, and renal insufficiency complicated her initial post operative course. Although Mrs. Sanchez recovered without sequella, she is 18 months into recovery and 20 pounds from her ideal body weight.

In summary, bariatric teams should closely and extensively evaluate candidates for gastric bypass surgery. The ideal team includes, at a minimum, a dietitian, psychologist, nurse, and experienced bariatric surgeon. To optimize results, candidates are carefully selected based on objective risk factors and predictors of outcomes. Keys to long-term success are patient education and compliance to programs in the pre-operative phase as well as during postoperative follow-up. The more clearly the goals of the intervention are defined, the greater the likelihood of the patient's compliance. For the well-informed, carefully chosen, and compliant patient, gastric bypass surgery can be life changing and sustaining.

Resources
A major criterion of eligibility for gastric bypass surgery is Body-Weight Index (BMI). You can compute your BMI: Weight [in kilograms / (Height [in meters])2 at the National Institutes of Health (http://nhlbisupport.com/bmi/bmicalc.htm).

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Virtual Mentor
American Medical Association Journal of Ethics
December 2002, Volume 4, Number 12: 278-280.

PERSONAL NARRATIVE

Through the Physician's Eyes: Evaluating Patients for Gastric Bypass Surgery

David Provost, MD

Media coverage of singer Carnie Wilson's gastric bypass surgery has brought the topic to the attention of many and probably will prompt a surge of requests for the procedure. It is reasonable to assume that not all who respond to ads offering the surgery or request it from a surgeon will be suitable candidates. We asked 2 physicians who specialize in treating patients with obesity to discuss the topic, addressing specifically how they determine patient eligibility for the surgery and what its risks and benefits are.

For nearly 40 years, doctors and patients have turned to surgical options in an attempt to produce sustained weight loss. Since its introduction nearly 3 decades ago, the Roux-en-Y gastric bypass has been become the gold standard for evaluating surgical treatments for morbid obesity. Improvements in surgical techniques and pre-, peri-, and post-operative management have resulted in reductions in complications and surgical mortality and improved durability of the gastric bypass. When patients inquire about the possibility of bypass surgery for morbid obesity, they must be well informed of the risks of the surgical procedure and the benefits that they can expect to achieve. The surgery poses considerable risks, with frequently quoted operative mortality rates ranging from 0.5-1.5 percent, and major complications ranging from 5 to 10 percent. Several large, recently published studies of laparoscopic gastric bypass have reported mortality rates less than 0.5 percent.

Balancing these risks are the potential benefits, which are substantial. Nearly 1 in 3 Americans is obese, a condition which is a major contributing factor towards the development of diabetes, hypertension, hyperlipidemia, and atherosclerotic heart disease. Obesity is also associated with an increase in mortality rates, the risk of death increasing with the increase in Body Mass Index (BMI). Fifteen percent of those classified as obese fall into the category of extreme or morbid obesity, as defined by a BMI greater than 40. Myriad other medical conditions result from, or are exacerbated by, this excessive weight, including gastroesophageal reflux disease, urinary incontinence, venous stasis disease, low back pain and osteoarthritis, hepatic steatosis, obstructive sleep apnea, pseudotumor cerebri, and the obesity hyperventilation syndrome consisting of pulmonary hypertension, right heart failure, hypoxemia, and hypercapnea. Unfortunately, medical therapy, whether dietary, pharmacological, or behavioral, is unsuccessful in producing sustained weight loss in over 95 percent of patients who are morbidly obese.

With surgery, type II diabetes may be reversed in up to 90 percent of patients; the effects on hyperlipidemia are marked. Resolution or improvement in all of the aforementioned conditions can be expected. What other single operation or treatment can cure or improve more than 15 diseases or co-morbid illnesses? The risks and benefits of surgery must be individualized for each patient. I often find that the patients with the highest peri-operative risk are those with the most to gain. A homebound oxygen-dependent patient with biventricular failure would be considered a prohibitive operative risk for most other operations, but when faced with the alternative—no effective therapy—a gastric bypass is a sound and, most often, a greatly beneficial choice. Having counseled more than 1,000 prospective weight loss surgery patients, I have found less than 1 percent for whom the risk of surgery is too great.

While the overwhelming majority of morbidly obese patients could benefit from weight loss surgery, not all are appropriate candidates. A patient's mental approach to gastric bypass is the key to optimal success as well as satisfaction. They must understand that they will never eat "normally" again. Patients must learn to eat small portions, chew well, eat slowly, and stop when they are full. Overeating will result in discomfort and vomiting. Some foods may not be tolerated. Eating, for many patients with morbid obesity, has served as a coping mechanism or crutch in times of stress. The weight loss surgery candidate must be willing to make this break with food and if they do not, they are likely to be unhappy despite weight loss, which will often be less than average.

Unfortunately, preoperative psychological testing has been unable to accurately select, with a few exceptions, who will fail and who will succeed following a bariatric surgical procedure. Psychological counseling is, however, a very important part of the postoperative adaptation phase for many patients. I have found that personalized preoperative counseling with a patient, discussing the changes that can be expected following surgery, is the best way to determine who is an appropriate candidate for a gastric bypass. I may meet with a patient on 3 occasions to discuss risks, benefits, and lifestyle changes prior to surgery.

The decision to proceed usually resides with the patient. Patients are strongly encouraged to start a regular exercise program preoperatively, are given intensive dietary counseling, and are asked to try to lose 10 to 15 pounds prior to surgery. Many experienced bariatric surgeons require preoperative weight loss prior to surgery in an attempt to eliminate patients less likely to comply with post operative dietary and activity instruction. While such a process may improve results, it may also exclude many patients who would benefit from a weight loss procedure. One of my patients, for example, is 39 years old and weighed more than 600 pounds. He was homebound, cared for by his elderly parents, and had developed severe congestive heart failure and the obesity hypoventilation syndrome. His blood gas values, in room air, were PaO2 of 37 mm Hg and PaCO2 of 76 mm Hg. Although this patient strongly desired a gastric bypass, it was clear from our discussions that

he was unlikely to exercise regularly and dietary compliance would be a problem. He is now 4 years post op and has lost more than 200 pounds. He still will not exercise, and dietary compliance remains a constant challenge. Nevertheless, his cardiorespiratory difficulties have resolved and he is able to care for his, now severely disabled, parents.

My most frequent reason for denying gastric bypass surgery is that a prospective patient fails to meet minimum weight criteria as established by the NIH consensus guidelines. I have watched a patient purposefully gain 40 pounds to meet eligibility criteria, and I stress that this is not acceptable. Patients who are not candidates for surgery should be placed in comprehensive weight loss management programs. Although success comparable to surgery is unlikely, even modest reductions in weight will result in improvements in diabetes and hyperlipidemia. Accepting a patient for gastric bypass surgery means I am taking on the patient for the remainder of his or her life. Optimal success depends on much more than a well performed surgical procedure. Lifelong emotional support, dietary counseling, and nutritional monitoring are keys to any weight loss surgery program. We have never advertised our services, but are scheduling new patients more than a year in advance. Successful, happy patients are the best advertisement.

Resources

A major criterion of eligibility for gastric bypass surgery is Body-Weight Index (BMI). You can compute your BMI: Weight [in kilograms / (Height [in meters])2 at the National Institutes of Health (http://nhlbisupport.com/bmi/bmicalc.htm).

Citation

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