

Questioning The Overall Benefit Of Medical Care
David G. Schwartz, M.D., March 9, 2010

A basic assumption that receiving “health” care is always desirable needs to be questioned. What is the overall net effect for the whole population when the pluses and minuses are totaled? How can the individual choose *real* health care that is most beneficial and avoid taking unnecessary risks with dangerous medical and surgical treatments and hospitalizations? The benefits of medical care, both theoretical and proven, have been amply presented to us in volumes of information by the medical profession, health departments, news media and by word of mouth. In contrast, harmful effects are sporadically reported in terms of adverse events, medical errors, and malpractice. It is unusual to see a thoughtful evaluation of the overall picture, “weighing it in the balance.”

A commentary in JAMA (Journal of the American Medical Association) 2009, by Kilo and Larson, “Exploring the Harmful Effects of Health Care” describes direct and indirect forms of harm and asks whether, in balance, the harmful effects are more than cancelled out by the benefits. Kilo and Larson point to direct harm due to physical harm from adverse drug reactions and medical errors, over-treatment and treatments without sufficient evidence of benefit. Another excess is intensive “life” prolonging end of life care, which only 30% of people over 80 want, but 63% receive anyway.

Another kind of direct harm is emotional harm from unnecessary testing and treatments. Screening for which there is not proven value can create exaggerated fears and can “medicalize” normal phenomena. Indirect harm can come from diverting resources from less expensive effective care such as health education to more expensive, high-tech less proven treatments, and by diverting funds from beneficial human services such as jobs, environmental quality and education. The rising number of medical bankruptcies also contributes to poor health. I would add that drugs from human waste pollute the water supply and ecosystems. More has been written about this topic over the past three decades.

In 1975, Ivan Illich’s *Medical Nemesis*, claimed that medicine did more harm than good and introduced the term “iatrogenesis” (harm caused by medical care) to the larger public. Four years later, McKeown’s *Role of Medicine* examined mortality reports for the previous century and concluded that of the 23 years increased life expectancy, only 1-2 years could be attributed to medical care. Most of the increase has been due to better sanitation and more availability of foods. More recently, attention is being paid to adverse effects of drugs, surgery and hospitalization, whether by properly delivered care or by error. Longitudinal data on medical care and health outcomes in older Americans, adjusting for prior health status, has also failed to demonstrate significantly improved health outcomes subsequent to more use of health services. Rather, *increased use of medical care is largely associated with poorer health outcomes*.

A 2001 review showed conflicting data on the benefits of medical care, with some reports showing approximately four years of added life expectancy due to medical care. Others show death rates higher in countries with greater number of doctors, and death rates from treatable diseases higher in areas with more medical care resources. The author notes that it is difficult to sort out the effect of medical care vs. other environmental conditions on health outcomes. He notes that life expectancy also is affected by a significant number of iatrogenic (caused by medical care) deaths, which he estimated to be 75,000 to 150,000 annually. There were several instances when doctors went on strike and no elective surgery was performed but only emergency services were available—the death rates went down until the regular work resumed.

In a commentary on quality of care and on the 1999 IOM (Institute of Medicine) report, the IOM estimated 230,000 to 284,000 deaths from iatrogenic (caused by medicine) origin annually.ⁱ Several estimates from other sources attribute 225,000 deaths to it. Even if the lower estimates were used, the medical system would be considered the *third* largest cause of death after heart disease and cancer. Death certificates usually report organ failure or the basic disease process as cause of death and not error or adverse or toxic effect of medication or surgical complication. The IOM suggests mandatory reporting of adverse events, but due to underreporting, iatrogenic causes are not usually cited in statistics. Thus, they remain “under the radar” and are not given appropriate attention when general statements are made regarding the role of modern medicine in health and disease. For example, on a death certificate the main cause of death may be listed as brain hemorrhage secondary to anticoagulation, secondary to blood clot in leg, but no mention of anticoagulant overdose. How does one decide what the “real” cause of death was? This demonstrates the difficulty of accurate reporting for causes of death.

Among 13 industrialized nations, the U.S. ranked 12th (2nd from the worst) on 16 health indicators including life expectancy and infant mortality. Countries ranking near the top have strong primary care infrastructures. Better health outcomes occurred with high primary care-to-population ratios, and poorer outcomes were associated with higher specialist-to-population or specialist-to-primary care ratios.ⁱⁱ High use of technology for diagnostic but not for treatment purposes in Japan had much better outcome than in the U.S., where high use of technology is used for treatment as well.

Dr. Lucian L. Leape, a founding member of NPSF (National Patient Safety Foundation) sponsored by the American Medical Association, showed that medical error rates were “distressingly high,” and what we see is only the “tip of the iceberg.” His compilation of several studies of iatrogenic injury rates varying from 4-36%, averaging 20% of all hospitalized patients with a 20% fatality rate, would calculate a total of 1,189,576 deaths annually, a much higher estimate than previously mentioned studies—making it the #1 cause of death in the US. He also did other calculations from other reports coming up with a smaller total of 999,000, still making it #1. (See table below):

Iatrogenic Injury Rates	
Adverse drug reactions (Lazarou)	106,000
Medical error (IOM)	98,000
Surgical complications (AHRQ)	32,000
Unnecessary procedures (HUCP)	37,136
Infections (Weinstein MMWR)	88,000
Malnutrition (Nurses' Coalition)	108,000
Outpatient complications (Starfield)	199,000
Bed sores (Barczak, Xakellis)	115,000
Adjustment of 1&2 total to 420,000	216,000
Total	999,000
(Leape's total for the top 2 was 420,000.)	

Obviously, some of these areas could be overlapping. Nevertheless, the total would likely still be #1 in rank for cause of death and still greater than cancer or heart disease. The greater

unanswered question is: *if the medical treatments that caused death in some people had not been done for the whole population, what would the death rates have been for the diseases not treated?* For example, if someone who died from bed sores had never gone to the hospital in the first place, would he or she have died earlier from the condition for which hospitalization occurred? If death rates were reduced from ceasing elective surgery, would those conditions later become non-elective and cause death later? There is no way to answer these questions without an extensive prospective study, which is not likely to be done when comparing current treatment with no health care at all. What it does tell us is that medical care has many risks that are under-reported and not fully appreciated, pointing to a reevaluation of our assumptions and attitudes toward conventional medical care and its alternatives.

One major priority should be the prevention of obvious errors; not just deviation from standards of practice or guidelines, but doing things that are not intended. Two main books address some of these issues. *The Checklist Manifesto*, by Gawande reports dramatic decreases in infections, post-surgical complications, deaths, and costs, through the institution of checklists in hospitals. Gawande has worked for several years instituting checklists, but only 10% of hospitals use them now. Checklists are standard safety practices in aviation, restaurants, and financial institutions. *Why Hospitals Should Fly*, by Nance advocates the same practices that prevent accidents in aviation to be instituted in hospitals, such as checklists and teamwork.

Another priority would be to avoid unnecessary treatments, such as non-emergency coronary bypass, stents and joint replacement. For coronary disease, medical treatment, lifestyle alterations (Dean Ornish Programs), nutritional therapies, and chelation therapy are alternatives to surgery. For joint replacement, prolotherapy, Egoscue therapy, and nutritional therapies can be alternatives to surgery. Shannon Brownlee's book *Overtreated* describes in detail the overuse of drugs and surgery.

From my perspective, the areas where more harm than good can result are:

1. Unnecessary elective surgery.
2. Managing symptoms of chronic disease with drugs.
3. Invasive tests done for reassurance and for “defensive” medicine.
4. High-tech end of life treatments.
5. Unproven screenings leading to unnecessary treatments.
6. “Medicalizing” normal variant phenomena for drug marketing.
7. TV ads for drugs, with patients pressuring doctors for new, less proven drugs.
8. Excessive numbers and doses of vaccines.

Areas where the balance is more beneficial are:

1. Emergency services for injuries and acute illnesses.
2. Prenatal care.
3. Health education for primary prevention and healthful lifestyles.
4. Screenings for blood pressure and cervical and colon cancer.
5. The team concept with the “medical home” for managing chronic diseases.
6. Hospice for end of life care (some studies show that patients who use hospice live longer than those who do not).
7. Physical therapy teaching home exercises.
8. Support groups.
9. Counseling, especially “Cognitive Behavioral Therapy.”

10. Complementary and Alternative Medicine

Public policy could be reformed to:

1. Support more primary care, health education and primary prevention with lifestyle measures (proven to reverse heart disease, hypertension, and diabetes).
2. Promote hospice, mental health services and complementary and alternative medicine.
3. Institute error reduction practices like those recommended by Nance and Gawande.
4. Limit direct-to-consumer drug advertising.
5. Eliminate the conflicts of interests and medical corruption resulting from physicians and medical schools taking enormous sums of money from the pharmaceutical industry. This is detailed in *On the Take*, by Jerome P. Kassirer, former editor of the New England Journal of Medicine. Also, an essay in the New York Review of Books entitled, “*Drug Companies and Doctors, a Story of Corruption*,” by Dr. Marcia Angell, also a former editor of the New England Journal of Medicine, reviews several books casting doubts on the validity of medical science and medical education because the information is slanted in favor of drugs, medical devices, and procedures.
6. Limit the rapid expansion of an excessive number of vaccines in the “pipeline” that appear to have a goal of making a vaccine for every infection. Limit the number of vaccines given to young children to those for infections which are clearly life-threatening. Break the corrupt ties between the WHO and the manufacturers of vaccines.
7. Promote alternative and complimentary medicine.

Making what is now considered “alternative and complimentary medicine” mainstream for most chronic disease management and prevention and turning the use of drugs and surgery into the “alternative” form of medicine would be a radical departure from current policy, but could result in much better outcomes. For example, when a nutritional or herbal therapy or a chiropractic treatment has adverse effects, or when an error is made, the repercussion is minimal in comparison to a bad outcome of surgery or an adverse drug reaction. The benefits are less proven, but the harm is much smaller. If much of the benefit people have in symptoms from treatment is from placebo effect, why not use a safer placebo and still have a chance that benefit will occur beyond placebo?

What can the individual do short of changing public policy? The following authors advise several caveats when entering a teaching hospital:

- “The People’s Pharmacy” radio show recently interviewed two people who shared very important stories about medical errors. Janet Lynn Mitchell, in her book, *Taking A Stand*, describes how patients can reduce the risk of medical errors on themselves, as she recounts a horror story of her personal experience as a patient.
- Pierce Scranton, MD, an orthopedic surgeon, authored a novel, *Death On the Learning Curve*. He outlines eight major issues patients need to consider before considering surgery at any teaching hospital:
 1. Know that someone is learning on you.
 2. Ask questions about the surgery itself.
 3. Ask the surgeon, “Are you going to be there for my surgery the whole time?”
 4. “What can go wrong?”
 5. “What are the alternatives?”

6. "Who outside your office could I consult with?"
7. "How long have you been in practice in this community? How many cases of this type surgery have you done? Would you mind if Dr. So and So would be there with you?"
8. Avoid the month of *July*. That is when all the new doctors start their rotations, and there can be much chaos.

My recommendations:

1. Whenever entering any hospital, always be sure you have a support person with you to help you communicate when you may be in a weakened or unconscious condition and to be on the lookout for errors by asking questions about each procedure.
2. Avoid elective surgery if at all possible.
3. Get a second opinion for any procedure or major treatment plan, especially cosmetic surgery, where the "perfect" may be the "enemy of the good."
4. Avoid prescription or non-prescription drugs unless it is obvious your life depends on them or you cannot function without them and you have exhausted other alternatives.
5. Avoid getting dental amalgams (mercury), and before getting a root canal, read George Meineg's book, *Root Canal Cover-up*.
6. Practice a healthful lifestyle and educate yourself about what contributes to good health and longevity.
7. Trust your own carefully thought out plans and your intuition before choosing a major procedure or treatment plan. Don't be frightened into making a quick decision when suddenly faced with a new diagnosis.
8. Establish a relationship with a "complimentary" practitioner.
9. Make use of the beneficial set of medical services listed above. Try to avoid the pitfalls of the more dangerous practices listed.

References:

ⁱ Starfield, Barbara, M.D., M.P.H., *Journal of the American Medical Association* 2000; 284:483-485.

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