Treatments for Breast Cancer

The September 3, 2014, issue of the Journal of the American Medical Association presented an article titled “Use of and Mortality after Bilateral Mastectomy Compared with Other Surgical Treatments for Breast Cancer in California, 1998–2011,” by Allison Kurian and coauthors.¹ The utilization of bilateral mastectomy (removal of both breasts) to treat unilateral breast cancer (on just one side) has been increasing steadily. In theory, removal of the opposite breast may reduce the risk that the disease will return and, consequently, concerns about recurrence. However, the bilateral procedure has more profound psychosocial complications—with body image, for example—and requires more extensive, and thus riskier, surgery.

In an observational cohort study of close to two hundred thousand patients in California, investigators examined rates of bilateral mastectomy and cancer-specific mortality. The rate of bilateral mastectomy for the treatment of breast malignancy increased from 2.0 percent in 1998 to 12.3 percent in 2011. The ten-year mortality rate for standard breast-conserving surgery (lumpectomy) with radiation was no different from the ten-year mortality for bilateral mastectomy. Unilateral mastectomy was associated with a higher rate of all-cause mortality.

A number of women in my practice have struggled with the decision between bilateral mastectomy and more localized surgery. Women with a genetic propensity to breast cancer often seem more inclined to opt for the more aggressive surgical treatment, that is, bilateral mastectomy. Further analysis of groups of women with different risk scores will be helpful to clinicians who counsel women on this decision. However, this article gives a clinician reasons to pause before routinely recommending

bilateral mastectomy in the hope of reducing recurrence rates or simply diminishing anxiety about future cancer.

Also of interest is what can be said about the ethics of prophylactic surgery to reduce cancer risk. Some may argue that it is a form of mutilation, the destruction of a normal organ, but this view ignores the intentionality of the intervention as well as the principle of double effect. I will leave that debate to other ethicists. For now, however, prudent surgeons should discuss all the risks and benefits of the surgical management of breast cancer with their patients in a spirit of empathy and integrity. I would hope a surgeon’s preference is not related to simple personal bias but is centered on the best medical evidence.

Antidepressant Use in Pregnancy

Sometimes it is not the results of the study that strike me, but another observation that catches my attention. For instance, a recent article by Krista Huybrechts et al. in the New England Journal of Medicine reports that 10 to 15 percent of pregnant women have clinical depression, and 8 to 13 percent use antidepressants.² I find it alarming that there is such a high level of depression in a group of what could be considered relatively young persons. I wonder if there are deeper existential crises underlying depression.

For some time, clinicians have been concerned about possible fetal effects from the maternal use of antidepressant medications. Numerous observational studies suggest the possibility that these drugs can alter fetal development. The Huybrechts article, titled “Antidepressant Use in Pregnancy and the Risk of Cardiac Defects,” reports findings from a study of a nationwide group of over sixty-four thousand Medicare recipients, and pays special attention to the incidence of cardiac defects in live births among women who took antidepressants during the first trimester of pregnancy. The findings suggest that there was no substantial increase in cardiac maladies among the children of women who took antidepressant medications.

Some limitations of the study are fairly obvious. The study was limited to the first trimester of pregnancy, and only live births were studied. Hence, appropriate adjustments were not made for rates of miscarriage or active abortion in this population-based study. However, prior studies also did not make adjustments for abortion and miscarriage, so the authors may, in fact, be comparing apples to apples.

On the basis of these findings, physicians may more confidently use medication to treat depression in women who are pregnant or at risk for pregnancy. I would hope, however, that counseling complements such treatment when appropriate. Research is needed into all the factors that contribute to such a high level of depression among these young women.

Bullying and Sleep Disorders

Things that go bump in the night can be distressing. This is true even if they are only dreams. Pediatrics presented an article titled “Bullying and Parasomnia:

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A Longitudinal Cohort Study,” by Dieter Wolke and Suzet Lereya, that examines the relationship between social bullying and nightmares and night terrors. Nearly 6,800 children were interviewed at elementary school age (eight and ten years) about their experiences with bullying, and at secondary school age (thirteen years) about parasomnias such as nightmares, sleepwalking, and night terrors. The interviews were performed by trained psychologists. After adjusting for other confounding factors and home situations, the researchers found a clear increase in the risk of sleep problems among children who had been victimized by bullying. A chronic victim of bullying was at least two times more likely to have one of these parasomnias. The authors argue that parents, teachers, school counselors, and other health care providers should enquire about bullying if a child is suffering from a parasomnia. I think that recommendation is beyond dispute.

One can certainly understand how the stress of bullying can seep into the subconsciousness of any individual. I still have occasional anxiety-ridden dreams about chemistry exams and even about a bully from early childhood. However, at the deepest level, it is a sad affair to see the innocence of youth so tainted by behaviors that attack human dignity, and one is left questioning how such things happen. One must also have sincere empathy for the victims, and perhaps even for the perpetrators. What emotional injuries may have led a person to abuse another? Our collective response to this complex problem must be tempered by equal measures of justice and mercy. The civilization of love we long for may seem unattainable, but the work must go on.

Ebola Virus

The recent Ebola outbreak in West Africa has brought its own ethical dilemmas. Health care for Ebola patients is delivered at high risk to providers, disparities in resources are exacerbated, and novel therapeutic interventions are fraught with controversy. The September 18, 2014, New England Journal of Medicine featured several perspective articles on the Ebola outbreak. I would like to note especially Jesse Goodman’s article, “Studying ‘Secret Serums’: Toward Safe, Effective Ebola Treatments.”

Two American volunteers, Kent Brantly and Nancy Writebol, received Zmapp, an experimental mixture of three monoclonal antibodies that had never before been delivered to human beings in this fashion. One can easily discern the ethical questions: When is it appropriate to utilize untried experimental therapy? Was it in the interests of justice to select first-world volunteers for the trial treatment? Does such a decision risk the forfeiting of public trust? The author reminds us that we need to think both carefully and humanistically about such questions. In the end, Goodman supports the use of the “secret serum” in treating both Brantly and Writebol and recommends administering such an unproven but promising therapy, when available.

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both in clinical trials and for compassionate use. He makes a strong closing point
that “we are increasingly one world and dependent on each other for knowledge,
safety, and security.”

I think he is on the right track. Classic Christian morality calls believers to
serve those in need. Caring for patients with the Ebola virus puts one at direct risk
of losing one’s own life. Such sacrificial acts can only engender admiration from
all people of good will. The motivation to travel to West Africa for medical mission
work, whether theistically inspired or not, is worthy of all of humanity’s support.

Prenatal Genetic Testing

The September 24, 2014, issue of the *Journal of the American Medical Associa-
tion* featured an investigation based on a randomized clinical trial, titled “Effect of
Enhanced Information, Values Clarification, and Removal of Financial Barriers on
Use of Prenatal Genetic Testing.” Researchers from the Department of Obstetrics,
Gynecology and Reproductive Sciences at the University of California, San Francisco,
set out to see if a decision-support guide and the removal of financial concerns about
testing would enable pregnant women of different ages and educational experiences
to make more informed choices about genetic testing and experience less decisional
conflict and regret about those decisions. The decision-support system was comput­
erized and interactive, and prenatal testing was made available to subjects with no
out-of-pocket expense.

Subjects in the group using the decision-support tool, compared with the con­
tral group, were less likely to have invasive testing (amniocentesis) and more likely
to forgo all genetic testing. The researchers did not find any difference between the
groups when it came to conflict or regret.

Several thoughts come to mind when analyzing the study. Were the fathers
involved in the decisions? Why did many women who received the educational
support choose less testing?

It should also be noted that in all five cases in which trisomy 21 (Down syn­
drome) was detected, the mothers underwent an abortion. This “selective termination”
of pregnancies among women carrying children with Down syndrome is in and of
itself a sign that “values clarification” is in order, for the value of these children, like
that of every child, negates the possibility of abortion. “Eugenics” is not too strong
a term for the routine practice of aborting fetuses who have trisomy 21. Much work
needs to be done in this particular area of pro-life activity.

Teenagers and Contraception

The conclusions derived from much clinical research can be considered intu­
itive. The October 2, 2014, issue of the *New England Journal of Medicine*
contains an article by Gina Secura and associates titled “Provision of No-Cost, Long-Acting

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5 Miriam Kuppermann et al., “Effect of Enhanced Information, Values Clarification,
and Removal of Financial Barriers on Use of Prenatal Genetic Testing: A Randomized
Clinical Trial,” *Journal of the American Medical Association* 312.12 (September 24, 2014):
1210–1217.
Contraception and Teenage Pregnancy." In an unimaginatively titled study called the Contraceptive CHOICE Project, 1,404 girls and women 15 to 19 years of age were studied prospectively after being taught about long-acting, reversible contraception methods to reduce unintended pregnancies. Long-acting contraception options included intrauterine devices (IUDs) and hormonal implants. Contraceptives were made available to participants without charge. Based in St. Louis, the study was funded by the Susan Thompson Buffett Foundation.

After the study initiation, 72 percent of the girls chose long-acting contraception (an IUD or implant), and 28 percent chose other options. No participants chose natural fertility methods.

After a two- to three-year follow-up, pregnancy rates, birth rates, and abortion rates were found to be significantly lower in the group that opted for long-term contraception.

No surprises here! Would the reader expect an alternative finding in the New England Journal of Medicine? However, the paradoxes are abundant. Is a young teenage girl who is encouraged to contracept with hormonal implants truly free, as the term “choice” suggests? I would argue no. Participation in the study did require parental consent. Although teenage pregnancy is not an ideal, the not-so-subtle treatment of pregnancy as a disease leads to a “eugenics-like” feel to the study. My own teenaged daughters, all four of them, have reassured me that by promoting their chastity, I have successfully imparted to them a sense of true freedom and dignity. This is the only evidence I need to continue to promote programs in our domestic culture that value abstinence until marriage.

Medical Marijuana

The country has been seeing an increase in the legalization of marijuana both for medical use and, more recently, recreational use. My own state, Pennsylvania, is currently debating the potential benefits of medical marijuana. The media has picked up an interesting study published in the October 14, 2014, issue of JAMA, titled “Medical Cannabis Laws and Opioid Analgesia Overdose Mortality in the United States: 1999–2010.” It was a time-series analysis of medical cannabis laws and their relation to opioid (narcotic) overdose. A review of death certificates served as documentation as to cause of death. After adjusting for age, the researchers found that the opioid overdose rate was correlated inversely with the legalization of medical marijuana. Specifically, the overdose mortality rate was nearly 25 percent lower in states where medical marijuana was legal, an association that seems to imply that its legalization has positive health effects.

I would suggest, however, that the implications of these findings are not yet clear. One cannot infer that marijuana legalization is the cause of the reduction in

narcotic overdose; the data show only a correlation. Is medical marijuana safer than narcotics, either as an adjuvant for the treatment of chronic pain, or even as a recreational tool that has been added to other such substances? An excellent editorial by Marie Hayes and Mark Brown puts things into a reasonable perspective and exhorts the scientific community to pursue further work in this area of inquiry.8

As a physician, I continue to resist calls to legalize marijuana, especially because of numerous health concerns. Some twenty-five years ago, I prescribed a form of oral cannabis for someone suffering intractable nausea from cancer treatment. My conscience was clear, and the therapy was effective. However, great caution is required in this matter, and any substances that can profoundly alter one’s mental capacity are wrapped in great moral complexities. The scientific community does recognize that this substance can disturbingly alter a human being’s perception of reality. This cannot be forgotten.

*Increasing Tolerance of Sex and Violence in Movies*

I often scan the pediatric literature to gain a sense of cultural context and see where we may be heading in the future. Constant exposure to immoral acts in print and visual media can lower one’s emotional reaction to such acts. Parents are called to guide their children’s media use in a way that allows for age-appropriate reflection and helps prevent an acceptance of harmful ideologies. All sin begins in the mind.

The November 2014 issue of *Pediatrics* included an article titled “Parental Desensitization to Violence and Sex in Movies,” by Daniel Romer and colleagues.9 A sample of one thousand adult parents with at least one child six to seventeen years of age served as the basis of the study. The parents viewed, in a random fashion, three pairs of short scenes with either violent or sexual content from popular movies that had recommended viewer restrictions. As their viewing exposure to violence and sexual content increased, parents accepted lower ages for their children to view such material. For instance, the ages they deemed acceptable decreased from 16.9 years to 13.7 years for viewing violence and from 17.2 to 14.0 years for viewing sex. These are significant drops, not only in years but in the emotional and spiritual maturity of the children. The study also noted that those who frequently watch movies are prone to such desensitization.

The authors make a logical assumption, an assumption that is made by most engaged parents. Can adult movie raters be influenced by the same gradual detachment from recoil at blatant immorality and violence? If we want to recover a greater sense of the value of the human life and the profound beauty of properly expressed sexuality, parents must show great self-control concerning their children’s media exposure. A fast from adult-themed movies could benefit both the parent and the child.

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Assisted Nutrition at the End of Life

I have written about the provision of food and fluid at the close of life several times in this column. As an active clinician, I have also wondered about the delivery of nutrition early in the process of acute illness, especially illness associated with poor oral intake. The lead article in the October 30, 2014, issue of the New England Journal of Medicine is a provocative review titled “Trial of the Route of Early Nutritional Support in Critically Ill Patients,” by Sheila Harvey and others.10 The authors studied a randomized cohort of two thousand four hundred patients with unplanned admissions to thirty-three intensive care units, and divided them into two groups—one of patients who received nutrition parentally (intravenously), and one of patients who received it by enteral means (feeding tubes). The investigators subsequently examined the outcomes. At the thirty-day mark, no significant difference in mortality was found between the two groups. The total number of calories delivered did not differ between the two groups, and moreover, the total calories administered did not reach targeted nutritional goals. There were no statistical differences in the infection rates. However, the patients who received nutrition intravenously had less vomiting and fewer low-sugar reactions.

I was pleased that there was a presumption in favor of providing medically assisted nutrition to critically ill patients. With about a 33 percent overall mortality rate in this population, a cynical clinician might question whether such delivery of nutrition is mandated and its expense justified in light of such poor outcomes.

Similar arguments have been made against providing assisted nutrition at the end of life. Assisted nutrition at the end of life is not in the same medical or ethical category as assisted nutrition in critical illness, however. The critically ill patient admitted to an intensive care unit requires aggressive efforts to restore health. The patient may be old, but the outcome of treatment is still very much unknown. I continue to advocate for aggressive nutritional support for the critically ill patients that I see, especially those who are hospitalized for reversible illness.

Providing Health Care to Friends and Family

On September 25, 2014, the New England Journal of Medicine featured an interesting contribution about physician ethics, titled “No Appointment Necessary? Ethical Challenges in Treating Friends and Family.”11 This essay originated at the University of Michigan and was written by Katherine Gold and associates. I have found the treatment of friends and family to be a prevalent activity that is not openly discussed. The 1993 guidelines of the American Medical Association code of ethics warns physicians to “generally” not treat immediate family members.12 The dangers

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of doing so are common sense: Will the physician ask the right questions? Will the clinician be too emotionally involved to make prudential decisions? Will the physician overtreat or underdiagnose?

There are, however, situations of medical urgency and perhaps even events of minor importance when a physician can treat a family member in good conscience. In fact, there may be an obligation in certain cases to treat an acutely ill relative. No one can fault a doctor for initiating CPR on a loved one or bandaging an open wound. But what about a physician who renews a prescription for high blood pressure for a spouse while on vacation? What about a prescription for an antibiotic to treat a sinus infection in the same circumstances?

In my practice I try to strike a middle ground. As a rule, I try to avoid directly caring for immediate family members, although I certainly have given advice when asked. In the complexity of family life, making professional distinctions can be very difficult.

The authors point out the obvious need for physicians to establish clear boundaries on those they care for, encouraging doctors in particular to care only for those for whom they are willing to formally establish a medical record. In serious emergencies, when no other alternative is available, a physician may have an obligation to render care to an immediate family member.

These guidelines seem reasonable. This area of medical ethics needs further exploration and input from practitioners. Should clinicians charge family and friends for their services? That is a question for another day!

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