Medicine

The Debate over Circumcision Practices

Circumcision has been publicly debated since the Apostolic Council of Jerusalem. Public health officials have shown interest in the subject for some time, especially with regard to sexually transmitted diseases. Some years ago, I reviewed a manuscript submitted to a prestigious Catholic publication objecting to circumcision as a form of mutilation.

The March 26, 2009, issue of the *New England Journal of Medicine* presented an article titled "Male Circumcision for the Prevention of HSV-2 and HPV Infection and Syphilis" (Aaron A. R. Tobian et al.). It reports findings from a study of 5,534 HIV-negative, uncircumcised men between the ages of fifteen and forty-nine years. Of these, 3,393 were seronegative for herpes simplex virus type 2 (HSV-2). The seronegative subjects were assigned to one of two groups: the 1,684 men in the first group underwent immediate circumcision, and the 1,709 in the second group (the control group) would undergo circumcision at twenty-four months. Blood testing and physical examinations were performed periodically to document the development of new disease.

After two years, the conversion rate to seropositivity for HSV was 7.8 percent in the circumcised group and 10.3 in the delayed-circumcision group. The prevalence of high-risk human papillomavirus (HPV) genotypes was 18.0 percent in the circumcised group and 27.9 in the delayed-circumcision group. There was no difference in syphilis rates between the groups.

Circumcision is known to reduce HIV rates, but these findings show that it also reduces the incidence of HSV-2 and HPV infection. The public health benefit of circumcision seems obvious. Moreover, prior studies have suggested decreased rates of penile cancer in circumcised men. Admittedly, penile cancer is a very rare disease, but it can be devastating when it occurs.

Despite concerns about circumcision as a surgical intervention, parents should be informed about its potential health benefits. The Torah, or Old Testament law, required circumcision for all Jewish men as a mark of the covenant between God and the Jewish people. It may also have provided Jewish men with crucial health protection.

The Influence of Faith in End-of-Life Care

I have always believed that a deeply religious person would be more likely to refuse aggressive medical treatment in the face of a serious cancer diagnosis. I may have been wrong. In a multi-site, prospective, and longitudinal study of 345 patients with advanced cancer, Andrea C. Phelps and her colleagues have assessed the effects of positive religious coping over a three-and-a-half-year period ("Religious Coping and Use of Intensive Life-Prolonging Care near Death in Patients with Advanced Cancer," *Journal of the American Medical Association*, March 18, 2009). The receipt of mechanical ventilation or resuscitation in the last week of life defined intense life-prolonging care.

Patients with a high degree of religious coping and spiritual orientation were 2.8 times more likely to be ventilated in the last week of life. The study satisfactorily adjusted for advance directives, proxy involvement, and coping skills; these variables did not affect the final conclusions. The reason for the connection between religiosity and aggressive medical care is not known. One can suppose that very religious patients may maintain an especially strong sense of hope that God will intervene to reverse their condition. I experienced such a case in a man suffering from end-stage lung fibrosis and a recent stroke. His wife, who was also his surrogate decision maker and highly faithful, remained open to the possibility of a miracle cure even hours before his imminent death.

Mechanical ventilation may be a marker for a delay of the inevitable as a patient awaits divine assistance. One may also consider the sanctity-of-life values and anti-euthanasia attitudes of the highly religious. Although the authors of the study report a percentage of Catholics in the study cohort and a percentage of those Catholics with high religious coping, the study does not report statistical differences based on denominational affiliation. I would find such information helpful.

The Catholic Church has a well-developed moral approach to decision making for patients with end-stage illness, grounded in a reasoned analysis of proportionate and disproportionate care. This medical-moral approach deserves better dissemination through patient education. All clinicians of good character can contribute to this effort.

Effects of Imposing or Proposing Temperance

Temperance is a critical virtue in the acquisition of a morally sound and virtuous life. A fundamental question is whether temperate drinking should be imposed on, or proposed for, those who have an alcohol dependency.

The April 1, 2009, issue of *Journal of the American Medical Association* presents an article titled "Health Care and Public Service Use and Costs Before and After Provision of Housing for Chronically Homeless Persons with Severe Alcohol Problems," which was designed to evaluate (1) the effects of a Housing First program on public use

and costs of service among chronically homeless patients with alcohol problems, and (2) changes in reported alcohol use by housed participants. Unlike shelters, abstinence-based housing programs, and treatment programs, which forbid alcohol consumption, the Housing First program does not require sobriety or treatment attendance as a condition of housing, and residents are allowed to drink in their rooms.

In the article Mary E. Larimer and her colleagues describe a quasi-experimental study design comparing ninety-five housed participants (the Housing First group), with thirty-nine wait-list participants. Variables including jail bookings and the use of shelter and sobering centers, hospital services, detoxification services, emergency medicine services, and Medicaid-funded services were tracked in both groups.

There was a 53 percent decrease in total health care and social service costs for the participants in the Housing First group in the first six months. Compared with costs for wait-list participants, the total costs per person in the Housing First group were nearly two thousand five hundred dollars less per month. Interestingly, daily alcohol consumption also fell by 2 percent per month among those placed in their own homes.

The authors point out that despite residents' freedom to drink in the housing-first program, actual consumption declined over time, raising the question whether rapid provision of a stable environment reduces the triggers to indulge in alcohol abuse. The researchers point out that discussions about the ill effects of alcohol abuse were part of the routine for participants in the Housing First project. Similar Housing First projects have allowed entrance into housing despite ongoing abuse of other substances as well.

Religious institutions, most notably the Catholic Church, are sponsors of homeless shelters around the country. Frank and open discussions about what works best in the delivery of this crucial form of charity are needed. The ethical dimensions will, of course, require deeper reflection.

Stem Cells and Type 1 Diabetes

Sound science can lead to advances in medicine while avoiding the moral dilemmas inherent in the destruction of human embryos for stem cells. The April 15, 2009, issue of the *Journal of the American Medical Association* featured a small study that demonstrated that adult stem cells may successfully treat newly diagnosed type 1 diabetes ("C-Peptide Levels and Insulin Independence following Autologous Nonmyeloablative Hematopoietic Stem Cell Transplantation in Newly Diagnosed Type 1 Diabetes Mellitus"). Carlos E. B. Couri and his colleagues reported that an experimental protocol of stem cell transplantation converted twenty of twenty-three patients with new juvenile diabetes to insulin independence. The patients' own beta cells were able to produce endogenous insulin and maintain glucose control. The stem cells were autologous and hematopoietic in origin. Levels of C-peptide, a marker for insulin production, were measured in response to caloric stimulation. Other end points included morbidity and mortality from the transplantation, overall diabetic control, and temporal changes in insulin requirements.

The mean follow-up period was thirty-one months. Two patients did require the addition of an oral diabetic agent to maintain control. There were no mortality differences; in fact, there was no mortality at all. Two cases of hospital-acquired

bilateral pneumonia were observed, however, and there were three cases of late endocrine dysfunction.

The findings of the study are intriguing for two reasons. The first is the strong possibility of a long-term cure for type 1 diabetes mellitus, which is such a tragic illness for the young. The second is that proponents of human embryonic stem cell research often include type 1 diabetes mellitus on their list of diseases that might one day be treated with therapy derived from human embryonic stem cells. This research may strike the disease from that list of hoped-for cures from this destructive research. Good science and good morals do not have to be divorced.

The debate over human embryonic stem cell research is not about "ideology versus rational science," as claimed by advocates of destructive research. It is simply about the immoral destruction of nascent human beings in an attempt to cure diseases—diseases for which alternative treatments, developed ethically without the destruction of human embryos, are now available.

Discoveries in Cardiovascular Health

An emotionally broken heart appears to lead to a physiologically broken heart. The April 21, 2009, issue of the *Journal of the American College of Cardiology* presents findings from a study by Heidi T. May and her colleagues, which explores the connection between depression and heart failure ("Depression after Coronary Artery Disease Is Associated with Heart Failure"). A total of 13,708 patients with coronary artery disease were studied. Of those, 1,377 had a diagnosis of depression after CAD was discovered. The incidence of heart failure was 16.4 percent among patients with post-CAD depression, compared with 3.6 percent among CAD patients without depression, showing clearly that depressed patients with coronary artery disease are at risk for the development of congestive heart failure. Treatment with antidepressant medication did have an effect on the development of heart failure.

It is not known whether different approaches to the treatment of depression will affect outcomes in heart disease. More research is anticipated in this interesting area of clinical association. I have presented a number of articles that have confirmed the intricate interplay between emotional–spiritual health and cardiac risk factors. One can easily conclude that a well-balanced life, with leisure and contemplation prioritized, will be of benefit in physiological terms.

Some years ago, I joked with a colleague about the possibility of a pill formulated with all the effective cardiovascular medications known to man. We are now one step closer to that reality. In the April 18, 2009, issue, *Lancet* published the report of a phase II trial, titled "Effects of a Polypill (Polycap) on Risk Factors in Middle-Aged Individuals without Cardiovascular Disease (TIPS): A Phase II, Double-Blind, Randomised Trial " (S. Yusuf et al.). Subjects receiving a combination polypill (Polycap) containing three antihypertension medications, aspirin, folic acid, and a cholesterol-lowering component were compared with subjects in eight groups who took one or more of the same medications (but not all six medications in the Polycap mixture.

The Polycap pill reduced blood pressure, heart rate, and cholesterol levels. Urinary thromboxane metabolites were tested to confirm the antiplatelet affects of aspirin. The Polycap pill was well tolerated and was no more problematic than

all other combination medications. In fact, it was tolerated as well as aspirin alone. The authors propose that the Polycap formulation can be used conveniently and will reduce multiple cardiovascular risk factors. Further study will be required in large populations to see if the polypill indeed reduces cardiovascular end points such as cardiac arrest, myocardial infarction, stroke, and death. The prospect of affordable and safe preventive medications for average-risk adults is very enticing. In what many see as an ethically toxic culture, a "polyvirtue pill" might be welcome as well—with equal compound strengths of prudence and fortitude.

Federal Born Alive Infants Protection Act of 2002

The federal Born Alive Infants Protection Act was approved in 2002 mainly to guarantee resuscitation efforts on infants delivered alive during failed abortion procedures. Other scenarios, of course, could require protection of newborns in unusual circumstances. The April 4, 2009, issue of *Pediatrics* presented an article reporting the results of a survey mailed to neonatologists concerning this legislative act (J. Colin Partridge et al., "Resuscitation of Likely Nonviable Newborns: Would Neonatology Practices in California Change if the Born Alive Infants Protection Act Was Enforced?"). The study originated in the Department of Pediatrics and the Department of Obstetrics and Gynecology at the University of California–San Francisco.

One hundred and fifty-six surveys were reviewed (a 44 percent response rate) and analyzed for attitude toward and knowledge of the legislation and anticipated changes in resuscitative practice because of the act. More than half the respondents had no prior knowledge of the legislative act; 63 percent felt that the act clarified the definition of born-alive infants. More than 90 percent criticized the legislation, and only 6 percent felt it should be enforced. If it were enforced, physicians expected that infants with lower birth weights and gestational ages would be resuscitated. The authors argued that until better outcomes are documented for infants born at less than twenty-four weeks' gestation, the legislation would be an undue burden on physician practice and parental rights.

It should be clarified that the act was intended for newborns in emergency room or outpatient settings, including abortion clinics. The authors may have been misconstruing the purposes of the bill when they surveyed inpatient neonatologists rather than emergency room physicians or abortionists. The act was not intended to interfere with routine neonatology practice. Rather, since abortionists are not likely to have vested interests in resuscitating "failed abortion procedures," the act was meant to prevent the dual cruelty of abortion followed by medical abandonment.

Autism and Vaccination

The cause of autistic disorders has remained elusive. In prior reviews, I have addressed the evidence of an association between vaccine use and neuropsychological disorders. Evidence continues to mount as to the true etiology of autism, which is often a devastating disease.

The May 1, 2009, issue of *Archives of General Psychiatry* presented research from the University of North Carolina that demonstrated that the amygdala is larger in young children with autism (Matthew W. Mosconi et al., "Longitudinal Study of

Amygdala Volume and Joint Attention in 2- to 4-Year-Old Children with Autism"). On average, the amygdala, a brain organ associated with emotional control, was 13 percent larger in toddlers with autistic disease. Although not associated with all dysfunctional social behaviors, attention difficulty and focusing problems were clearly associated with a larger amygdala.

Also of interest, *Nature* reported studies that up to 65 percent of autistic cohorts may have a genetic abnormality in a region of the genome that is responsible for the production of cell-adhesion molecules (Kai Wang et al., "Common Genetic Variants on 5pl4.1 Associate with Autism Spectrum Disorders," May 28, 2009). It is intuitive, therefore, to postulate that poor cellular intercommunication can lead to disordered thoughts and social processing. I am hopeful that new discoveries in this critical area of research may finally dispel misconceptions about the safety of childhood vaccines.

In a related matter, the May 7, 2009, issue of *New England Journal of Medicine* featured a special article titled "Vaccine Refusal, Mandatory Immunization, and the Risks of Vaccine-Preventable Diseases." S.B. Omer and colleagues point out that an association between areas of higher vaccine refusal and geographical outbreaks of disease has been demonstrated. Such infectious outbursts put the unimmunized at risk of severe illness, especially the very young.

A large cadre of clinicians has indicated in prior surveys that they would refuse to care for families who reject childhood immunizations. Both the authors of this article and the American Academy of Pediatrics advise against such an approach. It is critically important that clinicians educate patients on the health benefits of immunization but continue to care for those who decline immunizations because of ethical or medical objections. As an internist, I routinely have adult patients who refuse influenza vaccines despite my well-intentioned pleading, but I have never considered it an option to refuse to care for them. I would care for them even if they were severely infected by the flu. This is inherently consistent with the Christian ideal that calls for universal concern for all, a concern that is not limited by the prior choices of those who need care.

Medicaid and the Non-Elderly

Catholic social teaching clearly emphasizes the human right to the basics of a dignified life—including health care. In my medical practice, I have seen families struggle with access to the minimum of health services. Early this year, the *Journal of General Internal Medicine* presented a provocative work documenting the loss of Medicaid benefits among eligible adults (B.D. Sommers, "Loss of Health Insurance among Non-Elderly Adults in Medicaid," January 24, 2009). The survey study of Medicaid enrollment revealed a 21.4 percent disenrollment rate over a twelve-month period. Over the following year of the study, the rate progressed to 55 percent, with a significant number remaining uninsured. Men from the Southwest and younger individuals were more likely to be among the disenrolled. Review of the data does not reveal an increased income or the acquisition of new insurance as the main reason for insurance loss. Disturbingly, it may be suggested that the loss was simply due to the complexity of the process and other administrative headaches and burdens. For charity in any endeavor to be successful, it should follow the principle of

subsidiarity—in other words, it should be direct and simple. Complex institutional requirements, paperwork, and bureaucracy can stifle good works at every turn.

The Effects of Television on Children

In prior reviews I have pointed to the negative influences of poorly controlled modern media in society. Proof of this trend was found in the June 2009 issue of the *Archives of Pediatrics and Adolescent Medicine* ("Audible Television and Decreased Adult Words, Infant Vocalizations, and Conversational Turns"). This intriguing work by Dimitri A. Christakis and his colleagues was a prospective, population-based observational study of 329 children (ages from two to forty-eight months) who were equipped with digital recorders on random days for up to two years. A computer software program analyzed the sounds the children were making and the sounds they experienced from external sources.

The study demonstrated reductions in child vocalizations and attempts at conversation for each hour the television was on. Not surprisingly, both adult women and adult men had lower word counts during television exposure, in essence confirming less vocal interaction with the study cohort of children. They may have been involved in nonverbal communication such as hugging and charades, but this author thinks that unlikely. The message is clear—turn off the television and focus on our children. It will not only build solid and loving human relations, but will increase the vocabulary of all.

Unwarranted Criticism of the Pope

The March 28, 2009, issue of the *Lancet* published an editorial piece ironically called "Redemption for the Pope?" In it, Pope Benedict XVI was criticized for making an "outrageous and widely inaccurate" statement about condoms and HIV risk on his visit to Africa. The editorial goes so far as to suggest that the Holy Father may have deliberately manipulated science to support "Catholic ideology."

The editorialists do not apparently know the keen intellect of Joseph Ratzinger, or the scientific work that supports his statements.[1] Even without the scientific evidence, his plea for chastity is the most humane and reasonable approach to the HIV dilemma. His pleas for a truth-based and humanistic approach to this disease often goes unheard in the medical community. The *Lancet*'s slander against the Pope speaks more of their bias than of the truth of the matter. I continue to be heartily disappointed by the editorial perspective of most leading medical journals. Physicians versed in an understanding of the natural law need to speak loudly and without hesitation on these critical and weighty matters.

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[1] See, for example, the AIDS prevention work of Edward Green at Harvard University, http://www.harvardaidsprp.org/faculty-staff/edward-c-green-bio.html.