



MEDICINE

Family Presence during Medical Procedures

My thoughts on family presence during patient care have evolved over the decades. In the past, I endorsed limiting visiting hours and asking family members to leave during all procedures—after all, physicians needed to be focused on the task at hand. Nowadays, I advocate for more open visiting policies. One of the most aggressive medical procedures to be witnessed is the application of cardiopulmonary resuscitation and its attendant interventions (intravenous insertion, intubation, cardioversion shocks, etc.). The March 14, 2013, issue of the *New England Journal of Medicine* reported on “Family Presence during Cardiopulmonary Resuscitation” and its psychiatric effect on the family and medical personnel, as well as the presence of medical legal claims.¹ The authors, Patricia Jabre and associates, reported a positive effect on the psychological variables of family members who were present while their loved one received CPR. There were no legal claims, interferences with medical efforts, or stress on the care provider. Although one would postulate that observing a loved one’s cardiac arrest would precipitate flashbacks and anxiety, that did not seem to be the case here; indeed, it may actually be helpful for families in bringing closure and reducing a sense of abandonment. I believe that all those who render bedside care need to develop a more transparent attitude, especially with patients and their family members. There is very little to lose. If a clinician is motivated by compassion and integrity, he or she should have little to fear in such openness. Church and political institutions, and in fact all institutions, can learn much from this study.

¹ Patricia Jabre et al., “Family Presence during Cardiopulmonary Resuscitation,” *New England Journal of Medicine* 368.11 (March 14, 2013): 1008–1018.

Prognosis following Cardiac Arrest

The same issue of the *New England Journal of Medicine* taught me a lesson in humility. Most physicians know that if a patient survives cardiac arrest, the prognosis is not good. I have counseled my patients for years that if they survived cardiopulmonary resuscitation, their chances of ever returning to a home setting would be nearly nonexistent. P. S. Chan and colleagues addressed this issue in “Long-Term Outcomes in Elderly Survivors of In-Hospital Cardiac Arrest.”² A national registry of inpatient cardiac arrests with medical files served as the basis for the study. The authors analyzed 6,972 adults over the age of sixty-five who survived in-house cardiac arrest between the years 2000 and 2008, with particular attention to their one-year survival and readmission rate. One year after the event, 58.5 percent of initial arrest survivors were still alive, and a surprising 34.4 percent had not been readmitted to the hospital. The presence of a neurological complication was associated with a lower rate of survival. One-year readmission rates were higher among blacks and women. Interestingly, three years after the event, the survival rates were similar to those of patients hospitalized with heart failure.

I was surprised by the relatively robust number of survivors at one year. If I were more of a pessimist, I could easily state that nearly half of those who underwent arrests were not alive at one year—not an impressively good outcome. Moreover, many of the patients included in this study had comorbidities on admission related to cardiac, pulmonary, and renal disease. Only a small number suffered from metastatic or hematologic cancers. These data may need to be taken into account in the bedside discussions of hospitalized patients, but those discussions should also be tempered by a realistic review of the short-term prognosis after cardiac arrest. It has been found that of all patients who arrest in the hospital, only 17 percent survive to the time of discharge.³

Medical Marriage

What is the state of physicians’ marriages in the United States? Researchers from the Mayo Clinic presented an original article in the March 2013 issue of the *Mayo Clinic Proceedings*, titled “The Medical Marriage: A National Survey of Spouse/Partners of U.S. Physicians.”⁴ Tait D. Shanafelt and colleagues sent an e-mail invitation to 1,644 spouses or partners of physicians, and had a 54.2 percent response rate. A strong majority (86.8 percent) reported that they were satisfied with their relationship to their physician mate. There appeared to be no statistical relationship to physician specialty, work hours, or practice setting. However, physician partners

² P. S. Chan et al., “Long-Term Outcomes in Elderly Survivors of In-Hospital Cardiac Arrest,” *New England Journal of Medicine* 368.11 (March 14, 2013): 1019–1026.

³ M. A. Peberdy et al., “Cardiopulmonary Resuscitation of Adults in the Hospital: A Report of 14720 Cardiac Arrests from the National Registry of Cardiopulmonary Resuscitation,” *Resuscitation* 58.3 (September 2003): 297–308.

⁴ Tait D. Shanafelt et al., “The Medical Marriage: A National Survey of Spouse/Partners of U.S. Physicians,” *Mayo Clinic Proceedings* 88.3 (March 2013): 216–225.

often reported that their significant other frequently became irritable, too tired to engage in home activities, and too preoccupied with work. You may ask my wife if that is true. The most important variable attached to physician marriage satisfaction was the number of minutes the couple spent together—the more time together, the more satisfaction. One may argue that partners who enjoy a better relationship are more likely to spend time with their loved one. I am not fully convinced that time together is always the strongest determinant for success in marriage—some time together can be rather cantankerous. One can hope that as one experiences more time together in a relationship, the deeper the bond of communion and shared vision. This study did not address the sexual orientation of the responders. Given our modern culture and the recognition of atypical unions not formalized by institutional marriage, little comment can be made in that regard. Whatever the case, it is time for witnesses of marriage based on eternal truth to come forth and evangelize a society that is ignorant of the incredible importance of the nuclear family as the most integral unit of all human endeavors.

Music, Television, and Delinquency Rates

It is a common perception that beautiful music can calm the wild beast—perhaps even the wild beast in our own soul! I have always thought that more melodic music can soothe the temperament and even lead to a more affable mood. There are several books that deal with the interaction of music, theology, and morals. The February 1, 2013, issue of *Pediatrics* posted an article by Tom F. M. ter Bogt and colleagues titled “Early Adolescent Music Preferences and Minor Delinquency.”⁵ In a study of 309 subjects, the researchers related that young devotees of heavy metal, punk, gothic, and hip-hop music showed increased rates of maladaptive behavior and delinquency. Classical music, jazz, and pop sounds seem to reverse the risks toward delinquent behaviors. The authors assert that musical choices could have a direct correlation with bad behavior. One can easily postulate the reason for the association. However, it may be difficult to ascertain whether the preferences come first or the music itself induces immoral activity. Perhaps it is both. As Pope Emeritus Benedict XVI longed for more Gregorian chant and liturgy, perhaps middle school teachers should advocate for Sinatra to be broadcast through the public address system.

In a somewhat similar vein, the March 1, 2013, issue of *Pediatrics* published a noteworthy study titled “Childhood and Adolescent Television Viewing and Anti-social Behavior in Early Adulthood.”⁶ Researchers studied a little over a thousand people from New Zealand from birth to twenty-six years of age, addressing markers for delinquent behaviors (crimes, antisocial personality traits, etc.). They discovered that young adults who engaged in lengthy times of television viewing were more inclined to negative behaviors. Even after variables such as intelligence, economic

⁵ Tom F.M. ter Bogt et al., “Early Adolescent Music Preferences and Minor Delinquency,” *Pediatrics* 131.2 (February 2013): e380–e389.

⁶ Lindsay A. Robertson, Helena M. McAnally, and Robert J. Hancox, “Childhood and Adolescent Television Viewing and Antisocial Behavior in Early Adulthood,” *Pediatrics* 131.3 (March 2013): 439–446.

status, and parental control were brought to bear, the association remained. The reader may be aware that the American Academy of Pediatrics recommends no more than one to two hours of television viewing daily for children.

Dr. John M. Grohol, a psychologist, points out the limitations of the study on his blog.⁷ He remarks that the study did not explore parental marital status, religious upbringing, friend relationships, or time spent in creative play. However, it seems intuitive to me that the more time spent away from human interaction, spontaneous imaginative play, or even prayer, the more one is prone to maladaptive social experiences. I would like to believe that all young people are watching religious broadcasting, but I think that is highly unlikely. I do not always agree with the Academy's opinions, but in this case, I think they have it right.

Chelation Therapy

I have had a long-term interest in the scientific evaluation of alternative medicine therapy. The March 27, 2013, *JAMA* looked at the controversial treatments employed for atherosclerosis, namely, chelation therapy. Researchers studied the effects of EDTA (ethylenediaminetetraacetic acid) chelation in relation to cardiovascular events in patients with a prior history of heart attack. A standard chelation regimen included an infusion of chelation solution comprising EDTA, vitamins, electrolytes, and anticoagulant. To be in the study, a person had to have had a documented myocardial infarction by the usual accepted criteria. The average age was sixty-five. When compared to those who received a placebo, those who underwent chelation therapy had a modest reduction in deleterious outcomes, but this was most notable in revascularization procedures. The authors argue that more research is necessary, and their study does not clearly endorse the use of chelation as accepted practice. Certainly, there are a large number of patients who suffer from coronary disease who would be interested in this approach. Importantly, the researchers could find no effect on mortality rates in their review. This study will augment the arguments of those in the alternative medicine camp, yet caution is still the word of the day. No doubt, healthy lifestyle choices and an old-fashioned aspirin tablet are still highly effective and are still the proven therapies in this population.

Group Incentives for Weight Loss

It has been argued that human beings are social creatures by nature. Who wants to let down their entire group? The *Annals of Internal Medicine* featured a thoughtful article titled "Individual- versus Group-Based Financial Incentives for Weight Loss" in the April 2, 2013, installment.⁸ The authors studied 105 overweight and obese individuals in a randomized fashion using a one hundred dollar monthly weight loss incentive for a single person in comparison to a five hundred dollar shared reward among five persons if the group's weight loss was found to reach the

⁷ John M. Grohol, "TV, Violence and Children: More Weak Pediatrics Studies," *Psych Central* (blog), February 18, 2013, <http://psychcentral.com/blog/archives/2013/02/18/tv-violence-children-more-weak-pediatrics-studies/>.

⁸ J. T. Kullgren et al., "Individual- versus Group-Based Financial Incentives for Weight Loss," *Annals of Internal Medicine* 158.7 (April 2, 2013): 505–514.

goal. After twenty-four weeks of the study, the “group incentive” group was found to have shed more pounds, and they also maintained their weight loss over time. This study was populated by employees of the Children’s Hospital of Philadelphia, and since it was the sole employer, conclusions from this study may be limited. No doubt, peer pressure is a viable explanation for the better outcome. Would one be stigmatized if they held back the entire group from achieving a target goal? Once again, the psychology seems to be reasonable, and therefore further studies should be welcome. Would it not be inspiring to discover that the participants were motivated to lose weight for the benefit for their entire group’s health? The study did not analyze the reasons for the differences, but hope is eternal. I would like to believe that we are motivated from a “communitarian” spirit based in altruism rather than just a narrow self-centered and selfish goal.

Perceptions of Physician Appearance

My mother was right when she told me to put on a nice pair of pants and a good shirt when I went off to work. A research letter appeared in the March 25, 2013, *JAMA Internal Medicine* investigating physician attire in the intensive care unit and its relation to patient and family perceptions of physicians’ professional characteristics.⁹ This Canadian study, which was based on family surveys, looked at preferences for dress, grooming, identification cards, white coats, gender, and other variables. Participants also ranked photographs that randomly demonstrated thirty-two different styles of dress and appearance. The majority of those who participated in the studies favored physicians who were well groomed, dressed like a professional, and wore an identification tag. The white coat as a form of attire did not appear to be an important factor. However, when photographs were directly used, it did seem to play some role. The authors argued that traditional dress increased the respondent’s perception of competency, integrity, and quality of care. As much as society has progressed to a more informal approach in all aspects of life, when cared for in a crisis, they still look to traditional standards of discipline and conduct. I wonder if the same can be said for morality and liturgy. Many liturgical traditionalists would certainly agree. However, a fair amount of diversity was present among the thirty-two photographs that were shown.

Human Papillomavirus Vaccine

The April 18, 2013, issue of the *British Medical Journal* presented an original research paper titled “Genital Warts in Young Australians 5 Years into National Human Papilloma Virus Vaccination Programme: National Surveillance Data.”¹⁰ Hammad Ali and collaborators performed a trend analysis on data obtained between 2004 and 2011 at multiple “sexual health services” sites. It was found that 9 percent

⁹ S. Au, F. Khandwala, and H. T. Stelfox, “Physician Attire in the Intensive Care Unit and Patient Family Perceptions of Physician Professional Characteristics,” *JAMA Internal Medicine* 173.6 (March 25, 2013):465–467.

¹⁰ Hammad Ali et al., “Genital Warts in Young Australians 5 Years into National Human Papilloma Virus Vaccination Programme: National Surveillance Data,” *British Medical Journal* 346.f2032 (April 18, 2013), <http://www.bmj.com/content/346/bmj.f2032>.

of the patients presenting to the clinic were diagnosed with genital warts. After further analysis and investigation, a significant decline in the rates of genital wart infection among women was noted following the introduction of the human papillomavirus vaccine (Gardasil). Similar declines among men were thought to be related to the increasing immunity of the total population (herd immunity). These findings are not surprising, and those who promote universal vaccination programs for this virus now seem to have reasons for a mandate. Thoughtful critics of this approach see the vaccine as just a Band-Aid to a deeper crisis of depersonalized sexual activity. However, a reasonable counterargument can be made—until the culture heals itself, any intervention that significantly reduces the burden of disease cannot be seen as intrinsically immoral. I am sure this debate will continue as more data and more arguments develop.

Surgical Complications and Hospital Finances

As our society struggles with the increasing cost of health care, it would be logical to assume that the more care is delivered, the greater the cost. How much are the imperfections, complications, and mistakes of medical practice part of that cost? The April 17, 2013, *JAMA* published an original contribution titled “Relationship between Occurrence of Surgical Complications and Hospital Finances.”¹¹ Investigators from the Harvard System, including well-known surgeon Atul A. Gawande, retrospectively studied data from twelve hospital systems in relation to common surgery complications, hospital costs, and billing. The bottom line is that the greater the complication rate, the greater the hospital income and, to use financial language, “contribution to margin.” As physicians and hospitals successfully reduce errors by implementing checklists, error safeguards, evidence-based guidelines, and educational initiatives, hospital income will decline in the short-term. To offset this negative financial effect, payment systems will need to be progressively developed to reward good behavior, innovation, and achievement of patient safety goals. One can certainly see the conflicting forces in modern health care, and all the reasons that we need to keep in mind our first principles of medical care. These first principles take on new urgency. They are based on the dignity of each human person, and therefore health care must holistically seek every patient’s biological, psychological, and spiritual well-being. The reduction of their suffering is the end goal of health care.

End-of-Life Planning

Daren K. Heyland and associates published an original investigation in *JAMA Internal Medicine* titled “Failure to Engage Hospitalized Elderly Patients and their Families in Advanced Care Planning.”¹² The authors investigated twelve hospitals in Canada in a prospective fashion, looking at the relationship between serious illness in its elders and the implementation of their end-of-life decisions. Of the 278 patients

¹¹ S. Eappen et al., “Relationship between Occurrence of Surgical Complications and Hospital Finances,” *JAMA* 309.15 (April 17, 2013): 1599–1606.

¹² Daren K. Heland et al., “Failure to Engage Hospitalized Elderly Patients and Their Families in Advanced Care Planning,” *JAMA Internal Medicine* 173.9 (May 13, 2013): 778–787.

studied, a majority (76.2 percent) thought about their last wishes, and only 11.9 percent preferred care that would sustain their life in its last days. A little less than half of the patients completed an advance care protocol, and nearly three quarters of them appointed a surrogate for health care decisions. A concordance between a patient's expressed wishes and documentation in the medical record only occurred 30 percent of the time. The authors rightly pointed out this rather dismal communication failure with the health care team. It makes little sense to have an adequate and reflective discussion on end-of-life care if the team in charge of carrying it out is not aware of its content. I am sure that in my own practice I have not always done the best job in this regard. It is one reason why I advocate ongoing dialogue during a patient's illness to reduce that risk. The development of the POLST movement can be seen as a reaction to many of the poor communication experiences seen in the modern practice of medicine. In the end, there is no sufficient reason to excuse the clinician of their critical duty to listen to the patient and carefully record end-of-life discussions. No doubt, this will enhance the trust that patients have for their caregivers.

Contraception as Primary Care

The May 15, 2013, issue of *JAMA* featured a point-counterpoint discussion of contraception as an essential primary care service.¹³ "Family planning" physicians from Northwestern University (Dana R. Gossett and colleagues) argued in favor of universal access. They concentrate their argument on the "health benefits" of not being pregnant (e.g., the lower risk of blood clots) and the lack of "preventive" services in socially underserved populations. In my opinion, they make an indefensible claim by questioning why religiously based institutions would cover screening for sexually transmitted diseases since such institutions promote chastity. An elementary understanding of Christian logic could easily refute such a claim by noting that we are called to hate the sin and love the sinner. Rev. Eric Zimmer and associates from Creighton University School of Medicine do a commendable job in countering the assertion that contraception is a fundamental health right.¹⁴ However, neither viewpoint goes to the deeper issue, that contraception is at its core connected to selfishness in human relationships and only a partial acceptance of the other (whose fertility and fecundity are negated) and the rejection of the reality that all human life is a profound gift. Much evangelistic zeal is needed in this area of discourse. As Pope Francis has exhorted us, we must go out to the margins of society, even to the academic departments in medical institutions!

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¹³ Dana R. Gossett, J.W. Kiley, and C. Hammond, "Contraception is a Fundamental Primary Care Service," *JAMA* 309.19 (May 15, 2013): 1997–1998.

¹⁴ Eric Zimmer, Jos V.M. Welie, and Marc S. Rendell, "Contraceptives and the Law: A View from a Catholic Medical Institution," *JAMA* 309.19 (May 15, 2013): 1999–2000.