Difficult feat: conducting high-quality research in challenging areas

The death of University of Chicago Professor Emeritus Paul Meier makes us stop and appreciate his tremendous contribution to human health. An early champion of randomized controlled trials, he helped to save millions of people from pharmacologic and other interventions that were well intentioned but not well proven. The eponymous Kaplan–Meier curves have become a mainstay of statistical methodology and his seminal article on understanding survival is one of the most commonly cited articles. His work focused on bringing scientific integrity to complex problems of human health. It highlights the need for rigorous research in all areas of science especially on difficult topics.

Dr. Meier’s work affected many areas of human health. But it has important lessons for reproductive health as rigorous, high-quality research is critically important in the field of family planning. Yet, such research is no small feat. Policies prevent federal funding for research on abortion. Youth are considered a special population, so these studies receive special scrutiny by institutional review boards. It would be easy to base abortion care on tradition or to only enroll subjects over the age of 18 years in research studies. Instead, these barriers compel us to conduct even more rigorous research when the opportunity arises.

The quantity and quality of research on abortion and contraception continue to grow, and academic meetings support their effort by providing a venue for sharing ideas. The North American Forum on Family Planning (the Forum), to be held October 22 to 24, 2011, in Washington, DC, presented nearly 120 research studies, and the scientific committee rated four most highly: three abortion studies and one on pregnant adolescents. In other words, these researchers have conducted high-quality research in difficult-to-research areas.

Attaia et al. from Gynuity Health Projects studied the effectiveness of medical abortion at 64–70 days compared to 57–63 days using 200 mg of mifepristone and 400 mcg of sublingual misoprostol. This very important study therefore has the potential to extend the gestational period for medical abortion and the amount and route of dosing for misoprostol. In a large study of 700 reproductive-age women in Ukraine, Georgia, India and Tunisia, patients were managed with this dosing regimen and outcomes for women at different gestational ages were compared. The researchers found similar success rates, pregnancy continuation rates and acceptability in both arms. These findings show that these methods can be used safely and effectively up to 70 days LMP. Furthermore, the study was conducted in a routine outpatient setting.

A second top abstract also comes from Gynuity Health Projects. In this study, Ragahavan et al. consider the use of misoprostol vs. misoprostol and mifepristone for midtrimester pregnancy termination. This randomized, placebo-controlled, double-blinded study included 260 women from 14 to 21 weeks’ gestation in Vietnam. Women were randomized to mifepristone or placebo 24 h prior to induction followed by 400 mcg of buccal misoprostol every 3 h up to five doses. The authors found a greater than twofold higher rate of complete procedure in the mifepristone group than in the placebo group. The time to complete procedure was also significantly shorter compared to misoprostol alone.

A third abortion study considered the psychosocial aspects of abortion patients in assessing how protesters affect women. Foster et al. surveyed 725 women who received abortion services, half of whom saw a protester. Interestingly, they found that young women of color (African American and Latino) were most likely to experience protesters trying to stop them from entering a clinic. Overall, it appears that protesters had little effect on a range of emotions, which included regret, relief, guilt, happiness, sadness or anger 1 week after the procedure. Although women who struggled with their decision were more likely to be among the 15% of women who were most upset by the protesters.

The final highlighted abstract focuses on a hard-to-reach population: pregnant adolescents. Tocce et al. from the University of Colorado considered the effect of offering adolescents immediate postpartum etonogestrel implants on continuation and repeat pregnancy rates. In this prospective study, 212 adolescents were offered a full array of contraceptives and 126 opted for the contraceptive implant. Adolescents who opted for the implant had significantly higher contraceptive continuation rates and significantly lower repeat pregnancy rates. Indeed, 21.3% of adolescents who did not use the implant experienced repeat pregnancy at 12 months, while 2.9% of those in the implant group experienced a repeat pregnancy. Put another way, the odds of becoming pregnant were ninefold higher among those who did not opt for the implant.
These research studies can change clinical practice, policy and/or affect major public health problems. They all deal with important topics and many reach conclusive findings. It is a shame that there is so little federal support for research of this caliber. Yet, these researchers and others who engaged in academic discourse at the Forum deserve credit for conducting rigorous research in complex areas.