magnesium sulfate for 12 hours (n=60) or 24 hours (n=60). The data were analyzed on an intention-to-treat basis, and the intervention was not masked.

Women treated for 12 hours had decreased exposure to magnesium sulfate compared with those treated for 24 hours. Clinical outcomes were similar in both groups, and no cases of eclampsia were diagnosed in either group. There was no need to reinitiate treatment with magnesium sulfate in either group after the scheduled course of therapy was completed. Of note, magnesium sulfate therapy was extended in 3 of the women receiving the therapy for 12 hours. Women in the 12-hour treatment group had significant reductions in the duration of postpartum indwelling bladder catheter use and in the time they were required to be on bed rest. The interval between delivery and maternal contact with the newborn infant also was significantly reduced in women in the 12-hour magnesium sulfate therapy group compared with those in the 24-hour magnesium sulfate therapy group.

The investigators concluded that treatment with postpartum magnesium sulfate for 12 hours instead of 24 hours is associated with decreased overall exposure to magnesium sulfate, a shorter interval between delivery and maternal-newborn bonding, decreased indwelling catheter time, and a quicker return to ambulation.

Pregnancies Reduced by Long-Acting Reversible Contraception Training in Family Planning Clinics

Written by Toni Rizzo

Although approximately half of all pregnancies in the United States are unintended, the use of highly effective contraceptives, such as intrauterine contraceptives and implants, is low. Many health care providers in the United States lack knowledge of current scientific information on long-acting reversible contraception (LARC) and do not routinely offer these methods when counseling patients at the highest risk for unintended pregnancy, including adolescents, nulliparous patients, and patients who have undergone abortions.

The aim of the National Trial of Contraceptive Acceptability [Harper CC et al. *Obstet Gynecol* 2014; ClinicalTrials.gov identifier NCT01360216], presented by Cynthia C. Harper, PhD, University of California, San Francisco, USA, was to determine whether a clinic-based education and training intervention for clinicians and counselors on LARC would result in increased use of LARC among clinic patients.

This cluster-randomized trial was conducted at 40 Planned Parenthood sites. Twenty sites were randomly allocated to receive LARC intervention training, and 20 control clinics did not receive training. In total, 1500 women ages 18 to 25 years were recruited at 23 family planning clinics and 17 abortion clinics. Method-choice analysis was conducted with 802 patients from the intervention sites and with 698 patients from the control sites. Pregnancy outcomes were monitored over 12 months with survey data, medical record review, and pregnancy tests. A blinded outcomes assessor conducted an intention-to-treat survival analysis with shared frailty.

The training intervention consisted of a half-day continuing medical education–accredited LARC education and hands-on training given to clinic staff members by an expert physician–counselor team. Instruction included updated method indications, side effects, benefits, risks, and patient eligibility on the basis of the Centers for Disease Control and Prevention's Medical Eligibility Criteria for Contraceptive Use. The training also included videos of young LARC users and providers who integrated LARC into routine practice; hands-on training with models; counseling skills, including tiers of effectiveness and ethics; and technical assistance for billing and clinic flow. All sites provided contraception under usual cost conditions.

In total, 739 patients from the intervention clinics and 623 patients from the control clinics completed follow-up for the pregnancy analysis. Baseline characteristics of the intervention and control patients were similar. According to the patient survey results, providers discussed LARC at 71% of intervention sites and 39% of control sites ($p \leq 0.001$) and oral contraceptives or depot medroxyprogesterone acetate at 81% of intervention sites and 83% of control sites. The women correctly ranked method effectiveness at 44% of intervention sites and 27% of control sites ($p \leq 0.001$), and 28% of women at intervention sites and 17% of women at control sites decided to use LARC ($p \leq 0.001$).

At family planning clinics, pregnancy rates were significantly lower than at intervention sites (7.9/100 person-years [PY]) compared with control sites (15.4/100 PY; HR, 0.53; 95% CI, 0.33-0.86; $p \leq 0.001$). At abortion clinics, pregnancy rates were 26.5 per 100 PY at intervention sites and 22.3 per 100 PY at control sites (HR, 1.35; 95% CI, 0.91-2.01). Kaplan-Meier analysis of the intervention effect in a model with an interaction for setting type demonstrated a significant effect of training on reduced pregnancies at family planning clinics but not at abortion clinics.

This half-day, replicable training intervention effectively reduced pregnancy rates at family planning clinics. The intervention did not reduce pregnancy rates at abortion care clinics, likely because of current contraceptive cost policies in this setting. This trial contributes data to the available evidence on methods for reducing unintended pregnancies in the United States.