Does a Surgical Career Affect a Woman’s Childbearing and Fertility? A Report on Pregnancy and Fertility Trends among Female Surgeons

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BACKGROUND: Increases in pregnancy complication rates and use of assisted reproductive technology (ART) have been demonstrated in female urologists and orthopaedic surgeons when compared with the general US population. To determine if childbearing differences exist across specialties, we evaluated female surgeons in all fields, particularly with regard to fertility.

STUDY DESIGN: An anonymous, 199-item survey was distributed via specialty female surgeon interest groups and word of mouth to general surgery, gynecology, neurosurgery, ophthalmology, orthopaedics, otolaryngology, plastic surgery, podiatry, and urology. The 1,021 responses were analyzed and compared with Centers for Disease Control National Survey for Family Growth and National Institute of Health data to identify differences between populations.

RESULTS: Of women surgeons, 32% reported fertility difficulty; 84% of whom underwent infertility workup. Seventy-six percent of these women used ART to attempt pregnancy. In comparison, only 10.9% of women in the general US population report infertility, and 11% seek infertility services. Of all babies born to female surgeons, at least 13% were conceived using ART. Surgeons had 1.4 biological children, less than the national average. Age at first pregnancy was 33 years, compared with a national average of 23. If ART was implemented, surgeon age at first birth increased to 35.4 years. Highest rates of infertility existed in otolaryngology (29%), general surgery (22%), and orthopaedics (18%).

CONCLUSIONS: Female surgeons have first pregnancies later in life, fewer children, and report more issues with infertility. Assisted reproductive technology is implemented more often by female surgeons than the general population. Differences in fertility exist between specialties and warrant additional study. (J Am Coll Surg 2014;219:944-950. © 2014 by the American College of Surgeons)

It is well known that the number of women entering the workforce has increased over the years. Changes in labor laws and leave policies, better child care options, and societal acceptance of nontraditional male and female roles have made it easier for women to work. This change is also reflected in American medicine. The percentage of incoming female resident physicians in 1998 was 36.4%. That figure rose almost 1% per year during the next decade, leading to 48% of all medical students being women in 2009. As would be expected, the percentage of females going into surgical specialties has also increased, nearly to the same degree—about 9% on average across the specialties. As women who enter medical school and residency are in the prime time of their childbearing years, it would be anticipated that this increase of women in surgical fields could impact childbearing.

We have previously published studies that showed that, when compared with the general US population, female urologists and orthopaedic surgeons have increased pregnancy complication rates. As surgeons tend to delay...