Pregnancy during postgraduate surgical training

Over the years, a fair amount of research on pregnancy and postgraduate medical training has been completed. A simple PubMed search on this topic generates hundreds of hits, and yet we are not done examining this very important topic. In this issue of the *Canadian Journal of Surgery*, Merchant and colleagues¹ address this topic again. They discuss pregnancy as a potential cause for lack of interest in general surgery as a career choice among aspiring medical students. Research conducted by the authors among participants in a single general surgery residency program over a 12-year period found evidence to support their hypothesis that general surgery residents were dissatisfied with the lack of program-specific maternity/parenting policies. Indeed, data collected by the researchers also suggested that there were a significant number of adverse events experienced by pregnant residents, including hypertension (17%), pre-eclampsia (17%) and miscarriage (11%). Moreover, other residents reported that their own workload was increased because of a colleague's pregnancy.

A growing trend we are beginning to notice is that, over time, women are steadily outnumbering men among medical school graduates. According to Canadian medical education statistics from the Association of Faculties of Medicine of Canada (AFMC) for the academic year 2010–2011, women accounted for 57.1% of medical school graduates in Canada. The importance in this statistic lies in the fact that the average age of a graduating medical student wishing to join a residency training program is 28 years, which not only happens to be within a woman's prime productive years, but also is an age at which many start their families. It is for this reason that program directors must start to pay more attention to pregnancy and postpartum issues if they are to grow their programs with a balance between the sexes.

Pregnancy during surgical residency training can create many challenges for both the trainee and peer residents in the program. General surgery, unlike other specialties, can be more physically demanding, requires longer hours and is not as flexible as other residency programs. These challenges, coupled with inadequate policies around this issue, might account for an overall disinterest in general surgery. The study by Merchant and colleagues also shows that postchildbirth experiences like breastfeeding were truncated and that respondents reported that they would definitely have had a better experience with a few more weeks of maternity leave. It is therefore no wonder that these hardships can deter from general surgery as a career choice.

Jane van Dis, in her article "Residency training and pregnancy,"² indicates that pregnancy during residency may also have psychosocial effects on a resident's quality of life. She quotes a study that found, compared with spouses of male residents, twice as many female residents rated their pregnancies very or extremely stressful.³

A clear, articulated policy on maternity leave and early parenting is indicated in addition to the establishment of designated spots within the hospital premises for breastfeeding residents to pump their milk. Furthermore, a more sensitive approach to call scheduling would balance out the workload among pregnant residents and their colleagues. At the same time, such a policy should be crafted with caution and attempt to avoid conflicts with growing pressures of work-hour restrictions so that postgraduate surgical trainees may acquire all competencies and skills. Perhaps a fresh look at competency-based surgical education rather than time-based training will offer a solution, and flexible rotations, including simulation experiences, will allow comprehensive training. These measures are as yet unproven.

In summary, this important work by Merchant and colleagues¹ adds valuable insight into the challenges faced by women who aspire to general surgical careers while starting their families. As stated by the authors, a Canada-wide survey of all general surgery programs is in progress and will be highly anticipated. Meanwhile, programs should carefully craft policies to accommodate their residents and reduce stress during pregnancy, childbirth and postchildbirth. It is an essential step to attract talented men and women to train for careers in general surgery.

Garth L. Warnock, MD

Coeditor, *Canadian Journal of Surgery*

Competing interests: None declared.

References

1. Merchant S, Hameed M, Melck A. Pregnancy among residents enrolled in general surgery (PREGS): a survey of residents in a single Canadian training program. *Can J Surg* 2011;54:375-80.
2. van Dis J. Residency training and pregnancy. *JAMA* 2004;291:636. Available: <http://jama.ama-assn.org/content/291/5/636.full.pdf+html> (accessed 2011 Oct. 28).
3. Harris DL, Osborn LM, Schuman KL, et al. Implications of pregnancy for residents and their training programs. *J Am Med Womens Assoc* 1990;45:127-8.

DOI: 10.1503/cjs.030711