

Surgeons have a high infertility rate and pregnancy complications – what are we doing about it in Australia?

The number of female trainees is on the rise, and so too are the issues surrounding fertility and barriers to family planning.¹ Over the past decade, studies of surgical residents across the United States have demonstrated a strong prevalence of fertility challenges.^{2–5} Strenuous training requirements have American female surgical trainees delaying pregnancy, having fewer children, and reporting increased rates of pregnancy complications, infertility, and use of assistive reproductive technology. Similarly, a survey of British surgical trainees showed over a quarter of trainees felt unsupported by their department during pregnancy, while almost a quarter of both of male and female trainees experienced difficulty in arranging parental leave.⁶

Our recent article investigated how our long training programmes are affecting Australasian surgical trainees' ability to start families, particularly when compared with other specialities.⁷ While we acknowledge there are limitations to online surveys, the results of this survey of 1099 doctors demonstrated that surgeons, when compared with physicians and GPs, are experiencing greater challenges in balancing work and family, across multiple areas of fertility and child-caring. Surgical training occurs in the prime reproductive years and as a consequence, when many trainees finally complete their training, they are living the real-world consequences of reduced fertility because of their age. This highlights the critical need for a cultural change that's becoming increasingly important as the surgical workforce demographic changes.

Training bodies are in a prime position to provide solutions to the many obstacles surgical trainees face in family planning. There are several ways the colleges and hospitals can support a more equitable future for its members who want to pursue parenthood.

Flexible training schemes across all hospitals

Flexible training positions should be incorporated into the training structure to address the long working hours, country rotations, night shifts, and lack of antenatal leave, which have been associated with poorer pregnancy outcomes.⁸ Our study has shown that female surgeons and surgical trainees worked excessive hours during late pregnancy, had poor access to flexible work schedules, and had earlier breastfeeding cessation with lower associated satisfaction compared to other specialities.⁷ Not only does flexible training help to mediate the unpredictable nature of pregnancy and child-caring, but these schemes are also beneficial to men as the culture of child-caring responsibility changes and more men take an increasingly active role in parenting. Flexible training options can offset many

of these challenges attributed to the current working culture and is a very practical solution for RACS to promote in partnership with major teaching hospitals.

Reduce stigma associated with pregnancy and child-caring

The RACS' diversity and Inclusion policy aims to build a culture that consists of gender equity.¹ Part of the diversity and inclusion drive is to create real change in women's experiences through surgical training. However, many female participants in our study have indicated real struggles through medical training, with little collegiate support.⁷ Further practical support such as mentorship for parents and parents-to-be would create a supportive narrative. This can be a RACS run programme under a 'family planning' umbrella. Pregnant trainees want an open-door approach, with clear communication, support with their rotations and antenatal leave, and overall, a dissolution of the pregnancy taboo. They do not want special treatment, but rather seek a system that does not contribute to increased pregnancy loss and pregnancy complications. Mothers and mother-to-be will remain motivated and career ambitious as long as the structural, cultural and personal supports are available.^{9,10}

Recognition of parental leave

Current surgical training arrangements are inherently family-unfriendly. Training expectations and schedules favour individuals without regular family commitments or those with full-time stay-at-home carers, and thereby perpetuate the cultural status quo. This leaves many surgical females feeling forced to make the difficult decisions between a fulfilling career and a fulfilling motherhood.

Practical changes such as offering surgical education and training (SET) applicants curriculum vitae (CV) points for taking up parental leave would encourage both genders to participate and reduce the gender-based discrimination. This change has already been implemented by the College of Intensive Care of Australia and New Zealand. Such changes would prevent 'penalizing' the time taken to parent and provide care. It is another step to a dissolution of the inequity in surgery. If defence leave, rural experience, and humanitarian activities can be recognized on the SET application, so too could parental leave.

Access and time allocation to lactational facilities

Australasian surgeons have reported not having appropriate place to express at work, and early discontinuation of breastfeeding due to work demands.⁷ Setting up infrastructure to support breastfeeding mothers is not only a legal requirement, but a fundamental requirement for mothers to return to work. This would include a private room with a fridge and protected lactation breaks to prevent complications such as mastitis. It would foster a healthy work-place culture for working mothers to achieve their lactational goals.

Fertility and family-planning education

Discussion about family planning and fertility preservation among surgical trainees is of paramount importance. Trainees should be educated on the hazardous nature the operating room has on their fertility including radiation, anaesthetic gases and smoke from surgical devices.¹¹ Considerations such as fertility preservation leave would further support trainees who often take unpaid leave to access such services. These discussions are important because the current training structure of long training years (some in excess of 10 years), limited flexibility, night shifts, country rotations, and long working hours continue to contribute to the advancing maternal age and pregnancy complications. Fertility education would show a culture of support so that surgical trainees feel empowered to address their fertility concerns without fearing consequences.


Parenting and caring responsibility can have an impact across all stages of surgical careers. Australasia needs to not be left behind internationally on these prevalent issues. RACS has the opportunity to be at the forefront of diversity and welfare standards for its trainees, ensuring that parenting and a surgical career are compatible. With greater support, women in surgery will have every potential to thrive both personally and professionally.


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