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ORIGINAL ARTICLE

Australian medical students' and junior doctors' perceptions of gender discrepancies in obstetrics and gynaecology

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Background: There is currently a gender imbalance 85:15 female/male in the intake into specialist training for the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG).

Aims: To determine the views and perceptions of Australian medical students, and junior doctors in the first five years of practice, toward obstetrics and gynaecology (O&G) as a career, including whether there are any perceived barriers to the pursuit of such a career.

Materials and Methods: A semi-structured questionnaire was developed with members of the RANZCOG Gender Equity and Diversity Working Group. There were two separate studies: the first involved telephone interviews of medical students across three campuses of a medical school in North Queensland. The second study surveyed junior doctors in Queensland who are members of the Australian Medical Association. Responses were analysed and compared using quantitative and qualitative methods.

Results: Both studies found that experiences with O&G as a medical student influenced the decision to pursue O&G as a career. Exclusion from clinical scenarios and difficulty establishing good relationship with midwives within busy birthing suites were some reasons deterring male students from O&G. In addition, students felt poorly informed about the specialty in their preclinical years, affecting their early decisions in choice of specialty. Post-rotation, more female than male students reported positive experiences and were considering O&G as a career.

Conclusions: Both groups see medical student experience as critical in attitudes toward the specialty as a possible career. This experience plays a significant role in encouraging female students toward a career in O&G and discouraging male students. More exposure to the specialty in the preclinical years, and attention to improving clinical rotations for all students, is required.

KEYWORDS

careers, medical students, obstetrics and gynaecology, training

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INTRODUCTION

Currently there is an 85:15% female/male ratio among applicants for the first four years of training (the Integrated Training Program, ITP) of the six-year program leading to Fellowship of the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) and a similar ratio for acceptance into that program (Table 1). There is concern within the RANZCOG Board and the Gender Equity and Diversity Working Group (GEDWG) that there may be barriers, actual or perceived, during medical school training or the immediate postgraduate years, or both, to male junior doctors being accepted into the program.

We conducted two studies to identify the perceptions of medical students, and of junior doctors in their first five years of practice, toward a career in obstetrics and gynaecology (O&G), and to ascertain any reasons for the current gender discrepancy among RANZCOG trainees. By identifying barriers, and mitigating these, RANZCOG hopes to create a safer environment in which all applicants feel supported and encouraged to enter the field if they wish to do so.

MATERIALS AND METHODS

This paper reports on two studies. The subjects in Study 1 were undergraduate medical students from a medical school in North Queensland across three separate campuses, in both Year 4 (pre-clinical) and Year 6 (final year, post-rotation). A semi-structured questionnaire (Appendix S1) was developed with members of the GEDWG and based around similar surveys developed in Australian and overseas studies.¹⁻³

Randomised computer-generated selection was used to identify the research subjects. Students were invited by email to participate in a one-to-one semi-structured telephone interview, based around the questionnaire, between 1 July and 31 December 2020. Recruitment continued with the aim of achieving acceptance from ten male and ten female students from both the fourth and sixth years of medical school. Interviews lasted up to 40 min and ceased when saturation was reached as no new themes emerged.

Transcribed data were analysed using deductive thematic analysis where key ideas were drawn from discussions conducted in the GEDWG and incorporated into the questionnaire.⁴

Ethics approval was obtained from James Cook University (JCU) ethics committee (JCU EERC approval no H8605).

Study 2 was an online survey using a questionnaire (Appendix S2) based on that used for the medical students, with input from junior doctors and members of the Queensland Australian Medical Association (AMAQ); a small pilot study was performed prior to the main survey. AMAQ staff emailed all junior doctors in the first five years of practice (PGY 1-5) inviting them to participate in the survey, which was also advertised on AMAQ social media. Quantitative data were analysed

using SPSS v24. Univariate analysis (frequency, percent) was used to describe the sample. χ^2 tests were performed for differences in gender, experience, and perceptions of barriers. Independent samples *t*-tests were used for gender differences in experience during stages of medical career and associations between previous experience and perceptions of barriers to pursuing an O&G career. Missing data were omitted from each analysis. *P*-value of <0.05 was considered statistically significant. Qualitative data were analysed using thematic analysis as above.

RESULTS

For Study 1, sufficient numbers of Year 6 and female Year 4 students (from totals of 159 and 166 students respectively) agreed to participate and were interviewed; however, only seven randomly chosen Year 4 males agreed.

Year 4

More than half (57%) of 17 Year 4 students (ten female, seven male) had already made some decisions about future career paths. Six (60%) females were not interested in O&G, the remaining 40% expressed some interest; of the male students five (71%) were planning other specialties while two (29%) were 'open' to the possibility of O&G. Asked about knowledge of O&G as a career option, seven (70%) female students and four (57%) males felt they had little knowledge; the remainder felt better informed. The combination of surgery, internal and emergency medicine in the specialty, and the long hours worked by specialists, were the key points noted.

The main theme emerging from all students was that their clinical exposure up to that point had included very little O&G compared to general medicine and surgery. When there had been clinical exposure, usually in the form of short rural placements with general practitioners (GPs), reactions were of two kinds, generating two subthemes: the student was welcomed into the consultation by the consulting doctor, the woman, and nursing or midwifery staff, and the experience was very satisfactory and educational; alternatively, the student was excluded entirely from the consultation, resulting in no acquisition of clinical knowledge and a negative view of the specialty. One male student who had a positive experience said: 'the rural GP I was with went out of her way to teach and involve students overall making it a great learning opportunity and enjoyable experience.' The opposite experience was more common among, but not confined to, male students; one commented 'the only experience I have had so far is getting kicked out of all female-related consults which makes me feel like it might not be the field for me'.

The larger number of responses of female students compared to males in Year 4 was noted, but all Year 4 students would have welcomed more exposure to the specialty in their earlier years. One male student said: 'Giving information in the early years of

TABLE 1 Percentages of applicants for fellowship training applying, and applicants selected, by gender within Australia and New Zealand (supplied by Royal Australian and New Zealand College of Obstetricians and Gynaecologists)

Region	Indeterminate/intersex	2020		2019		2018		2017		2016		2015	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Eligible applicants (%)													
NZ	-	11%	89%	24%	76%	14%	86%	17%	83%	21%	79%	24%	124%
AU	1%	20%	79%	23%	77%	21%	79%	20%	80%	21%	79%	18%	82%
Selected applicants (%)													
NZ	-	14%	86%	19%	81%	10%	90%	19%	81%	6%	94%	18%	82%
AU	-	18%	82%	21%	79%	15%	85%	25%	75%	18%	82%	19%	81%

medical school may allow people to understand the specialties (better) before they decide.'

Year 6

Asked about their overall experience in O&G rotations among the 20 sixth year students (ten female, ten male), all Year 6 female students ranked this as either seven or eight out of ten; most males were similar, with two outliers, one 5/10 and one 10/10. All students were positive about their formal academic teaching; four (20%) also reported very positive experiences with both consultants and junior doctors in clinical situations while the remainder found these experiences mixed and dependent on the personality of the doctors involved.

One main theme identified regarding the experience of the clinical rotations was the often difficult relationship between medical students and midwives. All students commented on this; while three had no personal difficulties, they were aware of others who had. Eleven students had experienced midwifery students being prioritised for access to birth suite cases and others felt unwanted in the birth suite. However, there were also some very positive comments and for some students the experience was mixed: 'there were some midwives that were exceptional, that were willing to teach, however there were a few that saw you as a barrier rather than as part of the team.'

The most important theme encountered among Year 6 students was their now having strong opinions about their career paths; 14 (70%) students had made firm decisions in this regard and many of these planned to be GPs. These students also had definite opinions of the specialty; coming into their rotations they were 'unsure of what to expect'; after the placement, their knowledge and interest had grown. While some could 'potentially consider it as a career', 12 students (60%) would not do so. Two female students were definitely planning to try to enter O&G training and three were considering it. Three male students also said they were very attracted to the specialty and would consider it but all three had reservations, feeling that 'it would be difficult getting learning experiences' during training. Both male and female students said they understood that 'it is a very competitive pathway' and one male student said, 'I would have to consider whether gender would count against me.' Others noted that for O&G specialists there was potentially 'poor work-life balance.' Several students wanting to do GP or rural generalist training who had positive clinical exposure also indicated they would be interested in obtaining some exposure to O&G in that training.

Nine of the ten male students also commented that women may feel less comfortable with a male doctor than a female and that this could hinder their learning opportunities during specialist training. One noted he '...had to put in more effort than his female counterparts to get similar experiences, especially during the birth suite' - which made him feel he would '...struggle more during the training as a registrar to obtain required coursework/ experiences'. Most students stated that their experiences

improved, and the patients felt more comfortable with their presence, if they were introduced to patients by doctors or midwives as part of the team.

Another subtheme among these students was the variety that O&G provided – emergency medicine, obstetrics, and women's health as well as the different subspecialties. An important subtheme though, for both male and female students, was the demanding nature of the training years and then of the specialty itself, making it difficult to obtain adequate work-life balance.

For Study 2 a total of 94 (7%, 66 female, 28 male) survey responses were received from 1361 emails sent out (representing about 45% of junior doctors in Queensland); 38 respondents were already on specialist pathways (of which eight were in O&G training); 56 were not. Table 2 shows respondents' mean rating of their overall O&G experience at each stage of their career to date (responses shown in Tables 2, 3 are scored on a ten-point scale, 1 = Very negative, 10 = completely positive). However, when asked about specific elements of O&G experience, women were significantly more positive about their experiences with involvement in clinical care ($P = 0.027$) and relationships with other health professionals (doctors, midwives, etc) ($P = 0.046$) than men (Table 3). Table 4 shows participants' perceptions of barriers to pursuing an O&G career/specialty is significantly associated with experiences during medical school rotation ($P = 0.002$).

For thematic analysis of the free comments, initial coding produced three sets of themes and subthemes around three qualitative questions which were then stratified by gender:

Planning O&G as a career at the time of graduation

Four out of 12 male respondents planned O&G at the time of graduation, one writing, 'It's all I've ever wanted to do.' Three others cited the wide range of procedures and the mix of medicine and surgery '...great range of procedures, medical knowledge and high acuity patient care', and positive interactions with registrars and consultants during medical school, as important factors. Eight respondents had decided this was not their choice, only one cited perceived gender discrimination, the other responses being non-specific.

Five of 16 female respondents planned careers in O&G, all five citing both the mix of medicine and surgery as attractive, and the influence of positive female mentors during medical school: 'Always inspired by many strong female role models working in O&G.'

Impact of previous experience on O&G as a career

All nine responses from males to this question were negative. Three perceived gender bias against males in the specialty, two had negative experiences with consultants and three with midwives: 'unpleasant unwelcoming experience fraught with interdisciplinary disharmony'; two reported poor teaching of the subject in medical school, and one did not like surgery.

There were also significant negative responses from 13 female respondents, including medical school rotation experiences confirming they did not want to take this path (5), 'poor role models, unsatisfying work, poor patient care, poor patient outcomes, high stress, difficult midwives - unpleasant atmosphere, competitive with allied health; difficulties with midwives (2), poor role models (4), perceived racism (2), and lack of work-life balance in specialist practice (1). There were only two positive comments, both about medical school experience.'

Perceived barriers to training in O&G

Nineteen men answered this question. Two cited age and racism as barriers to entry to training; six had the perception that clinical experience during training would be limited for males; three said female patients preferred female doctors; six that there would be discrimination against them in efforts to enter the training program; one cited work-life balance as a barrier.

Thirty-nine women answered the question and reported barriers similar to those of their male colleagues. The long preparation needed before applying for training, and the application process itself, were cited by 12 respondents; the length of training by eight; a negative work environment by five; poor work-life balance by eight; challenges of pregnancy and childcare arrangements by five.

TABLE 2 Junior doctors' rating of obstetrics and gynaecology (O&G) experience during each stage of medical career – *t*-tests

	Total, mean (SD)	Female, mean (SD)	Male, mean (SD)	P-value
O&G experience during medical student rotation ($n = 93$)	6.23 (2.43)	6.34 (2.54)	5.96 (2.17)	0.498
O&G experience during internship rotation ($n = 60$)	5.68 (2.72)	5.96 (2.68)	4.57 (2.76)	0.233
O&G experience during resident rotation ($n = 47$) [†]	5.85 (2.90)	5.68 (2.98)	7.00 (2.10)	0.303
O&G experience during unaccredited registrar post ($n = 13$)	6.46 (2.67)	6.58 (2.75)	5.00	NA
O&G experience during O&G specialist training program ($n = 6$)	5.83 (2.79)	6.00 (3.08)	5.00	NA

Responses are scored on a ten-point scale, 1 = Very negative, 10 = Completely positive. NA used where $n = 1$ (males).

[†]Not all participants have experienced an O&G resident rotation.

TABLE 3 Specific elements of junior doctors' obstetrics and gynaecology (O&G) experience at each stage of medical career – *t*-tests

	Total, mean (SD)	Female, mean (SD)	Male, mean (SD)	P-value
Internship				
Involvement in clinical care	5.70 (2.13)	6.17 (1.98)	4.62 (2.14)	0.027
Relationship with other health professionals (doctors, midwives, etc)	4.86 (2.37)	5.32 (2.46)	3.77 (1.79)	0.046
Access to mentors/role models	4.89 (2.25)	4.94 (2.23)	4.77 (2.39)	0.823
Resident rotation				
Involvement in clinical care	6.18 (2.38)	6.37 (2.26)	5.13 (2.90)	0.176
Relationship with other health professionals (doctors, midwives, etc)	5.94 (2.56)	5.91(2.57)	6.13 (2.64)	0.827
Access to mentors/role models	5.38 (2.58)	5.28 (2.55)	5.80 (2.82)	0.570
Unaccredited registrar				
Involvement in clinical care	5.93 (3.26)	6.00 (3.37)	5.00	NA
Relationship with other health professionals (doctors, midwives, etc)	6.87 (2.72)	7.00 (2.77)	5.00	NA
Access to mentors/role models	6.73 (2.22)	6.86 (2.25)	5.00	NA
Specialist training				
Involvement in clinical care	5.86 (2.61)	6.00 (2.83)	5.00	NA
Relationship with other health professionals (doctors, midwives, etc)	6.57 (1.27)	6.83 (1.17)	5.00	NA
Access to mentors/role models	6.71 (1.50)	7.00 (1.41)	5.00	NA

Responses are scored on a ten-point scale, 1 = Very negative, 10 = Completely positive. NA used where $n = 1$ (males).

TABLE 4 Association between junior doctors' perception of barriers to pursuing an obstetrics and gynaecology (O&G) career and previous experience – *t*-tests

	Mean	SD	P-value
Experience during medical student rotation			
Perception of barriers to pursuing a career in O&G			
Yes	5.74	2.59	0.002
No	7.19	1.72	
O&G experience during internship			
Perception of barriers to pursuing a career in O&G			
Yes	5.67	2.54	0.968
No	5.71	3.55	

DISCUSSION

Both these studies were undertaken as the RANZCOG Board and the GEDWG are concerned that there may be barriers to male junior doctors entering training in O&G that are gender-based, and that if this is the case, steps need to be taken to try to remove these barriers. Up until the 1980s there were significant barriers to women entering the specialty; it has taken 40 years to overcome these, but now barriers for males must also be considered.⁵

Study 1 was originally planned as focus groups over several universities; this had to be modified during the COVID-19 pandemic but nevertheless valuable information was obtained. The response rate of junior doctors in Study 2 was low, probably

because most junior doctors have already decided against O&G as a career prior to graduation. However, the fact that the responses of doctors are very similar and complementary to those of the medical students suggests that the problems outlined are real and affecting decision-making from medical school onward.

Study 1 found more than 50% of medical students were already focused on a particular career path by the end of the fourth of the six years of training. Some at this stage were considering O&G but all felt poorly exposed to the specialty, and would have welcomed more clinical experience and information in earlier years. Formal clinical experience greatly improved their knowledge of what the specialty involves, the training needed and ultimately the lifestyle of O&G specialists. By the end of the rotations, poor clinical experiences, especially those unsupported within the busy clinical team which included midwives and/or midwifery students, meant that most male students would either not consider the specialty at all, or were wary of what training would be like for them. Female students were much more positive about the possibility of their training although students of both genders were cautious about ultimate work-life balance.

Male junior doctors who responded in Study 2 reported strong perceptions that they would experience discrimination attempting to enter training and within training itself; one commented 'discouragement from consultants stating specialists would not do well as males in private or public employment' and concerns about the prolonged preparation needed and the perceived non-transparent nature of the trainee selection process. They also reported negative experiences with midwives and consultants, the

belief that women patients preferred women doctors, and the observation that the lifestyle of O&G specialists did not allow for work-life balance. While female junior doctors did not record any perceptions of gender discrimination, they did report concerns about the application process for training, the length of training, and the difficulties balancing pregnancy and childcare with the long hours required of trainees and consultants. Respondents of both genders who were either already training in O&G or planning to be, reported finding the mix of medicine and surgery, and the practice of obstetrics especially, very positive and rewarding. Female junior doctors cited the influence of strong female role models in their medical school years encouraging them toward the specialty.

Recent studies have findings similar or complementary to ours. Several studies have shown quantitative differences in female and male medical students' clinical experiences of O&G, with female students in Australia, New Zealand and Malaysia reporting having performed more vaginal examinations than their male counterparts, and male students reporting being excluded from consultations more frequently than females.⁶⁻⁸ A US study of final year medical students showed that satisfaction with clinical experience in O&G rotations was rated as 'high' by almost 90% of students choosing O&G as a career path, compared to 10% of those who chose another discipline.³ These authors also noted that 'the emerging predominance of female providers detracted 38.5% of males vs 10.2% of females' from considering a career in the specialty. Similar findings have been reported from Latin America.⁹ A recent German study suggests there are gender-specific factors such as incompatibility of career and family playing a role in the choice of specialty training.¹⁰

An important finding from our research was the wish of all students to have women's reproductive health incorporated earlier into the medical curriculum, for example with general practice or rural placements in the preclinical years. The present Australian and New Zealand system of providing O&G rotations only toward the end of the clinical years potentially misses students who decide on another specialty early in their medical education. The other main finding is the need for greater liaison with practising midwives and midwifery tutors, and the development of strong and respectful relationships between consultant obstetricians and midwives and their representative bodies, to improve the experiences for all students, regardless of gender. A joint working party between RANZCOG and the Australian and New Zealand Colleges of Midwives would be an important step toward improving understanding and clinical experiences for both medical and midwifery students.

There also appears to be a need for more advocacy within the specialty to support the education of all students and understanding the barriers facing male students particularly by providing information and education to women attending for reproductive healthcare in teaching hospitals and clinics, so that the reasons

for attaching medical students to consultations and procedures are explained well in advance. Both male and female specialists should be involved in the provision of such support. An example could be the introduction of a detailed information sheet and consent form for women which include an opt-out system, to encourage inclusivity of all students in clinical experiences. An explanation for medical students of the role of midwives in the care of pregnant women, early in the medical school curriculum, and of the requirements of medical students, early in the midwifery curriculum, could lead to greater understanding by both groups of the needs for positive and respectful teamwork.

Female and male participants in both studies drew attention to what they see as non-transparent selection processes for the RANZCOG O&G training program. If gender is seen as a potential factor biasing selection, blinding gender identity through at least parts of the selection process could be one method of reducing this bias.

The main limitations of both studies were the relatively small number of interviews undertaken in Study 1 and the low numbers of survey responses in Study 2. However, a variety of experiences within the medical school resulted from our including students from three different campuses across North Queensland, and findings from junior doctors paralleled and complemented those from medical students. We conclude that positive and negative experiences of medical students in their O&G rotations are strong determinants of decisions to pursue, or to reject, careers in O&G, and that experiences in the junior doctor years reinforce views already formed as medical students. It is important that RANZCOG address at all levels the issue of increasing gender imbalance in the specialty.

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REFERENCES

1. Ismail SI, Kevelighan EH. Graduate medical students' perception of obstetrics and gynaecology as a future career specialty. *J Obstet Gynaecol* 2014; **34**: 341-345.
2. Ismail SI, Kevelighan EH. A questionnaire survey of first-year graduate-entry medical students' perception of obstetrics and gynaecology as a future career specialty. *J Obstet Gynaecol* 2020; **40**: 354-359.

3. Gariti DL, Zollinger TW, Look KY. Factors detracting students from applying for an obstetrics and gynecology residency. *Am J Obstet Gynecol* 2005; **193**(1): 289–293.
4. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006; **3**(2): 77–101.
5. Angstmann M, de Costa C. Gender equity in obstetrics and gynaecology – where are we heading? *Aust N Z J Obstet Gynaecol* 2019; **59**(2): 177–180.
6. Carmody D, Tregonning A, Nathan E, Newnham JP. Patient perceptions of medical students' involvement in their obstetrics and gynaecology health care. *Aust N Z J Obstet Gynaecol* 2011; **51**: 553–558.
7. Zahid AZ, Ismail Z, Abdullah B, Daud S. Gender bias in training of medical students in obstetrics and gynaecology: a myth or reality? *Eur J Obstet Gynecol Reprod Biol* 2015; **186**: 17–21.
8. Bhoopatkar H, Wearn A, Vnuk A. Medical students' experience of performing female pelvic examinations: opportunities and barriers. *Aust N Z J Obstet Gynaecol* 2017; **57**(5): 514–519.
9. Ng-Sueng L, Vargas-Matos I, Mayta-Tristán P *et al.* Gender associated with the intention to choose a medical specialty in medical students: a cross-sectional study in 11 countries in Latin America. *PLoS One* 2016; **11**(8): e0161000.
10. Riedel M, Hennigs A, Dobberkau AM *et al.* The role of gender-specific factors in the choice of specialty training in obstetrics and gynecology: Results from a survey among medical students in Germany. *Arch Gynecol Obstet* 2022; **305**(1): 129–137.

SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article.

Appendix S1. List of themes for semi-structured interviews.

Appendix S2. Online survey questionnaire themes and sub-themes Study 2.