



## GENDER ISSUES AMONG SOUTH AFRICAN ANAESTHETISTS

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**Objective.** To study gender issues among South African anaesthetists.

**Subjects and design.** A postal survey of all registered anaesthetists in South Africa in December 1999.

**Results.** There were 385 respondents out of a potential 960, giving a response rate of 40%; 77 respondents (20%) were female and 308 (80%) were male. The largest group of males was over 50 years old whereas most females were under 50 years. Most respondents chose anaesthesia because of academic appeal or career opportunities. More females reported experiencing sexual harassment and felt discriminated against in terms of job selection during the training period and with regard to referral practices. Most respondents felt that their colleagues did not treat them differently on account of gender but more females felt that both patients and female nurses treated them less favourably than their male colleagues. More males felt supported in their career by their life partners. More females felt that having children adversely affected academic and promotional aspects of their careers. Despite this, females were more likely to have experienced positive benefits from combining parenting with a career and were also more likely to have worked part time, mainly because of domestic commitments. Most respondents were satisfied with their careers, and would choose both medicine and anaesthesia again.

**Conclusions.** Our study suggests that female anaesthetists are generally satisfied with their career choice. However, they are exposed to significant gender-related stresses in the workplace, which are exacerbated by time conflicts for those with children. Allowing part-time employment options and creating a less discriminating environment would enable female doctors to achieve their potential.

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Despite the increasing number of female medical students and doctors over the past 30 years, only four studies that address gender issues have been conducted in South Africa during this time.

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Saxe and Van Niekerk<sup>1</sup> reporting the results of a 1974 study found that 84% of female graduates were working after qualifying, with only 58% working full time. They expressed the concern that women were not entering postgraduate training schemes, and suggested more flexibility in postgraduate training for women.

In 1988 Sanders and colleagues<sup>2</sup> surveyed female doctors practising in the Cape province and found that 90% of the respondents were working, but 39% of these were working part time. Family commitments were most commonly cited as the reason for not practising or working full time, and the availability of part-time posts was the most frequently mentioned requirement to facilitate returning to work.

In 1996 Saloojee and Rothberg<sup>3</sup> surveyed paediatric registrars at the University of the Witwatersrand, and found that 59% of the females felt they had been disadvantaged in their careers because of their gender, with 22% of the females reporting that they had been subjected to sexual harassment in the workplace. Of the female trainees, 82% were contemplating taking time off from paediatrics in the future, mainly to have children.

In 1999 Moodley *et al.*<sup>4</sup> reported on a postal survey which assessed the extent of employment-related problems experienced by female family practitioners. They found the absence of regulations regarding maternity leave and absence of legislation on pregnancy discrimination were obstacles in private family practice.

These studies suggest that women in medicine experience specific problems that may affect their choice of career and the progress of that career. These problems include combining domestic commitments with a demanding career, as well as issues relating to both gender discrimination and sexual harassment. Although the opportunities that anaesthesia offers for part-time employment have made this discipline attractive to female doctors, gender issues in anaesthesia in South Africa have never been studied.

We conducted a postal survey of all registered anaesthetists in South Africa to examine gender influences on the careers of male and female anaesthetic practitioners.

### METHODS

A database of all anaesthetists registered with the Health Professions Council of South Africa (HPCSA) was obtained at the end of November 1999.

In December 1999, a 53-item questionnaire was sent to all practitioners included in the database. This questionnaire was based on a similar study performed in Australia in 1998<sup>5</sup> and modified slightly to make it more appropriate to South African conditions.

The questionnaire consisted of questions eliciting yes/no



responses concerning choice of career, gender discrimination and sexual harassment, professional and personal relationships, family issues, career opportunities and career satisfaction. All the questionnaires were coded to protect confidentiality.

**STATISTICS**

The data were entered onto the Access database for analysis. Statistical analysis was performed using Statistica for Windows. Categorical data were analysed using chi-squared analysis with Yates's correction, or Fisher's exact test where single comparisons were made involving small expected values in any one of the cells of the contingency tables.

**RESULTS**

**Response rate**

There were 385 respondents out of a potential 960. This represents a response rate of 40%.

There were 77 female respondents (20%) and 308 male respondents (80%). Three forms were returned but not analysed. One of the female respondents had been working in Saudi Arabia for some time, and her responses were not relevant to South Africa. One male responded but refused to complete the form, and another form was returned unanswered by the widow of a recently deceased practitioner. The results were therefore analysed out of 382.

**Demographics**

Distribution of the sample by gender and age is shown in Fig. 1.

Significantly more females than males (71% v. 57.5%,  $P = 0.05$ ) were under 50 years of age.

Similar proportions of females (74%) and males (85%) were either married or had a permanent partner. Significantly more females than males (43% v. 27%,  $P = 0.14$ ) were married to other doctors, while significantly fewer females had children (68% v. 82%,  $P = 0.02$ ).

**Career choice (Fig. 2)**

Academic appeal and career opportunities were cited most frequently by both men and women as the major factor influencing career choice. Other factors included anaesthesia's perceived suitability for family life, cited significantly more frequently by females than males (18% v. 7%,  $P = 0.007$ ), and the influence of a role model, cited more frequently by males than females (38% v. 18%,  $P = 0.001$ ).

**Academic ability**

There was no significant difference between the number of females and males who passed the part 1 of the fellowship

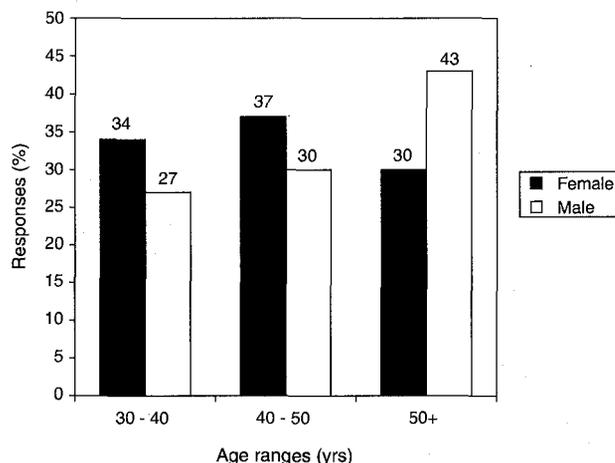


Fig. 1. Distribution of the sample by gender and age.

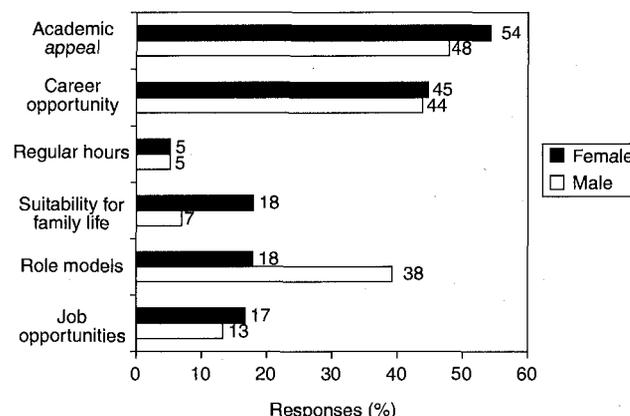


Fig. 2. Factors influencing career choice.

examination (66% females v. 72% males,  $P = 0.6$ ) or the final fellowship examination (84% females v. 78% males,  $P = 0.7$ ) at the first attempt.

**Sexual harassment (Table I)**

Significantly more females than males reported being sexually harassed and being offered preferential treatment in return for sexual favours during their career.

Table I. Sexual harassment

	Females (%)	Males (%)	P-value
Sexual harassment	32	5	< 0.0001
Offered preferential treatment in return for sexual favours	7	0.3	0.001



## Gender discrimination (Table II)

**Selection for training.** Significantly more females than males felt that they had been subjected to unacceptable gender-related questions at the job interview and that they had been discriminated against in terms of selection for training programmes.

**During training.** While significantly more females than males felt they were treated unfairly during their training, similar proportions of females and males felt that being of the opposite gender conferred advantage.

**After training.** Significantly more females than males felt that: (i) gender had an effect on obtaining a job after training; (ii) gender disadvantaged them in the workplace; and (iii) referral practices were influenced by gender.

**Table II. Gender discrimination**

	Females (%)	Males (%)	P-value
At job interview	22	0.3	< 0.0001
In selection for training	12	3	0.003
Unfairly treated during training	29	7	< 0.0001
Being of the opposite gender confers advantage	22	25	0.6
Obtaining a job after training influenced by gender	16	8	0.04
Disadvantaged in workplace because of gender	28	1	< 0.0001
Referral practices are influenced by gender	53	25	< 0.0001

## Aspects of training

Similar proportions of females and males felt that after-hours commitments during training should be altered (34% females v. 26% males,  $P = 0.3$ ) and that part-time training with the option of job sharing (41% females v. 23% males,  $P = 0.2$ ) should be available.

## Relationships with colleagues, patients and nursing staff (Table III)

**Relationships with colleagues.** The majority of both females and males, but significantly more males than females, felt that gender had no effect on relationships with their surgical and anaesthetist colleagues. Significantly more females than males, however, felt that they were treated differently (either better or worse) by their colleagues because of their gender.

**Relationships with patients.** Significantly more females than males found gender had an influence on relationships with both male and female patients.

**Relationships with nursing staff.** Although no difference

**Table III. Relationships with colleagues, patients and nursing staff**

	Females (%)	Males (%)	P-value
Colleague relationships not affected by gender	64	81	0.002
Treated differently by colleagues because of gender	36	19	0.002
Gender influences relationships with patients	63	16	< 0.0001
Treated less favourably by female nurses	38	1.5	< 0.001

between females and males was reported concerning relationships with male nurses, significantly more females than males reported being treated less favourably by female nursing staff.

## Effect of relationships on career (Table IV)

Significantly more males than females felt fully supported by their partners in their careers and felt that their personal relationships had a beneficial effect on their careers.

**Table IV. Career and relationship interactions**

	Females (%)	Males (%)	P-value
Fully supported by one's partner	68	85	0.004
Relationships benefit career	15	36	0.0007
Career impacted negatively on relationships	47	38	0.04

## Effect of career on relationships (Table IV)

Significantly more females than males felt that their career had impacted negatively on their marriage and personal relationships.

## Effect of children on careers (Table V)

Similar proportions of females and males with children felt that having children either affected the timing of their exams or required them to take time off work. However, significantly more females than males felt that having children affected both academic and promotional aspects of their careers negatively.

Significantly more females than males reported suffering sleep deprivation, being preoccupied with domestic chores, and not spending sufficient time with their children. However, significantly more females than males reported positive benefits including enhanced relationships and support systems from combining parenting with their career interests.



Table V. Effect of children on career

	Females (%)	Males (%)	P-value
Children affected timing of exams	19	11	0.04
Children necessitated time off work	31	25	0.13
Children affected academic aspects of career	42	0.8	< 0.0001
Children negatively affected being promoted	23	0.8	< 0.0001
Suffered sleep deprivation	40	22	< 0.0001
Preoccupied with domestic chores	39	6	0.008
Insufficient time with children	71	51	0.007
Positive benefits of combining parenting with career interests	73	15	< 0.0001

### Part-time work and professional committees (Table VI)

Significantly more females than males reported having worked part time at some point in their career and significantly more females than males worked part time because of the influence of domestic commitments.

Significantly more males than females had served on professional committees after training.

Table VI. Part-time work and professional committees

	Females (%)	Males (%)	P-value
Part-time work	39	9	< 0.0001
Part-time work necessitated because of domestic commitments	83	42	0.007
Served on professional committees	28	50	0.0007

### Career satisfaction (Table VII)

High proportions of both females and males reported that they were satisfied with their career choice and that they would choose a career in medicine and anaesthesia again.

Table VII. Career satisfaction

	Females (%)	Males (%)
Satisfied with career choice	82	90
Would choose a career in medicine again	70	69
Would choose anaesthesia again	72	75

## DISCUSSION

The accuracy of the HPCSA medical practitioner database has previously been questioned.<sup>26</sup> However, the HPCSA is the only organisation with which all practising doctors are legally required to register in South Africa and its database is therefore the most reliable one. Some doctors who have died, emigrated or retired remain on the register. The real population size available for this study is likely to be smaller than the figures indicate, and the real response rate is probably higher than the 40% reported. Reliable statistics regarding gender distribution among anaesthetists were not available, and we were therefore unable to assess with any accuracy the representativeness of our sample. Furthermore, a large proportion of the population sampled is unaccounted for with a response rate of 40%.

The results reflect that anaesthesia was chosen as a career for similar reasons by both sexes. Although anaesthesia is generally perceived to be a specialty appropriate for females because of its ease of adaptation to part-time and sessional work,<sup>7</sup> the majority of both male and female respondents chose anaesthesia for reasons related to academic appeal and career opportunity. It has previously been found that these factors are greater motivators of career choice than the expediency of suitability.<sup>8</sup> Significantly more females indicated that they chose anaesthesia because of its perceived suitability for combining a career with a family life however, although the overall percentage was small (18%).

A striking finding is that significantly more females felt discriminated against at all levels in their careers, i.e. when applying for a training position, during the training, and after training in the workplace. This high incidence of the perception of gender bias was also found by Saloojee and Rothberg<sup>3</sup> and in studies involving other medical specialties.<sup>9,10</sup> These influences could conceivably be responsible for the finding in international studies that women are less likely to succeed in academic careers than their male counterparts,<sup>9,11-13</sup> to earn less than their male colleagues even when hours worked and specialty are corrected for<sup>9,14-16</sup> and to experience greater work-related stress than their male counterparts.<sup>17</sup>

Sexual harassment in our survey was reported by 32% of females and 5% of males. These are comparable numbers to those reported by Saloojee and Rothberg<sup>3</sup> in South Africa (22% of females), and in other studies done in Australia<sup>5</sup> where 21% of the females and 13% of the males reported being sexually harassed at some point in their careers. These numbers are slightly lower than those reported from the USA<sup>10</sup> where 37% of the females reported being sexually harassed at some point in their careers. Sexual harassment is thought to be a manifestation of power rather than sexual attraction, and has been shown to impact negatively on the harassed individual resulting in feelings of anxiety, fear, vulnerability and stress.<sup>10,18</sup>

The possibility of gender-related differences in academic performance could account for the disproportionately low



number of females in the higher academic echelons. However, our study found no difference in academic performance on a gender basis. This is in agreement with the findings of other studies,<sup>3,19</sup> and a previous study<sup>1</sup> which found female undergraduates to have better academic ability than their male counterparts. Gender differences in academic ability are therefore unlikely to account for the low numbers of females in high academic positions. Despite this we found that significantly fewer women had served on professional committees since qualifying.

We did not ask for, or compare, the positions of those in academic appointments in our study, although work in the USA has shown that women faculty are promoted more slowly than men and that these gender differences are not explained by performance or productivity.<sup>12,20</sup> This theme has been a consistent one in most of the studies which have attempted to investigate the reasons why relatively few women succeed in the academic environment.<sup>21</sup> It is of note that in South Africa, not one of 11 full chairs in anaesthesia is occupied by a woman.<sup>13,22</sup>

We found that significantly more males than females felt a positive and supportive influence on their career from their partner or personal relationships. This has been shown by previous studies elsewhere<sup>17</sup> and indicates another gender-based influence on career success.

Significantly more females than males in this study felt that children adversely affected the academic and promotional aspects of their careers. This has been shown in other studies done on women in medicine.<sup>17</sup> Other studies have also shown that in dual-career households women put in more hours on domestic and child-related unpaid work and that women feel that their career progress is hindered by their domestic commitments.<sup>15,22-24</sup> This was reinforced by the evidence that more females worked part time because of family commitments in our study (39%) and in the four previous South African studies.<sup>1-4</sup>

It is interesting that despite the difficulties experienced, the majority of both sexes indicated career satisfaction (82% of females and 90% of males) and indicated that they would choose similar career paths again. This is similar to a study from the USA,<sup>25</sup> looking purely at female respondents, where 84% of female physicians surveyed were generally satisfied with their careers. In both our study and theirs, 69% of the females would choose to be doctors again, with 62% of the females in their study being satisfied with their choice of specialty, similar to the figure of 72% in our group.

Our study suggests that although female anaesthetists in South Africa are generally satisfied with their career choice, they are exposed to significant gender-related stresses in the workplace. The major problems appear to be the significance of perception of gender-related discrimination and high incidence of sexual harassment experienced.

Furthermore, role conflict and time stresses reported by those with children appear to create career conflicts, resulting in more females working part time.

The attitudes of those involved in the selection of applicants for training positions need to be addressed to ensure gender equity during the selection process. The rules governing training periods should be more flexible to allow the best applicants to specialise in anaesthesia regardless of gender. Interestingly, both males and females in the present study felt that part-time training and job sharing should be available. Allowing these options would improve gender equity and enable more female doctors to realise their potential.

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