

Women's Access to Medical Training in Australia: An Equity Issue?

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Abstract

This paper explores the access of women to medical training and notes that despite the over representation of women in higher education in Australia there is a disparity in medicine. Figures used in this paper have been taken from unpublished aggregated data, purchased from the Department of Employment, Education, Training and Youth Affairs. An analysis of these data revealed that the female presence in medicine varied considerably between universities; and that there was a strong correlation between so; country of birth and language spoken at home.

Introduction

Perhaps the most prestigious, and certainly the hardest to enter undergraduate field of study in Australia is medicine. In contrast to the situation with most courses, entrance by Australian students is strictly capped by the government. There were 6721 Australian citizens/residents enrolled in first medical degrees in 1996, plus an additional 964 overseas students. The great majority of the latter were fee-paying students, liable to fees of something like \$26,000 per year. (The financial contribution of overseas fee-paying medical students must not be forgotten. They pay millions into university coffers every year!).

Medical student numbers appear to have declined in recent years, but this is a statistical aberration caused by the fact that some universities now teach medicine as a second degree. For instance, at the Flinders University of South Australia medicine is now taught as a four year graduate entry bachelor degree rather than as a six year undergraduate degree.

The over-representation of women in Australian higher education has been noted previously, (for example, Birrell, Dobson, Rapson and Smith, 1995; Dobson, 1996) as has the fact that the female majority does not occur in all fields. While women were particularly over represented in bachelor degrees in education (76%), health (74%) and the humanities (70%), they were under-represented in fields such as engineering (14%), agriculture (35%), architecture (40%) and science (44%). Women have been in the majority overall since 1987, and have made rapid inroads into all areas of university study with the exception of engineering. Australian women's disinclination to enter this field has mirrored a worldwide pattern.

In years gone by, medicine was also considered to be one of the "non-traditional" courses into which it was said women found difficulty in gaining access. By 1996, enrolments by women comprised 47% of total enrolments in medicine, and this seemed low, considering that that female participation in bachelor courses overall is 55%. The intention of this paper therefore is to explore the disparity in medicine and to try to explain it. Figures used here have been taken from unpublished aggregated data, purchased from the Department of Employment, Education, Training and Youth Affairs. An analysis of these data revealed that the female presence in medicine varied considerably between universities, and that there was a strong correlation between sex, country of birth and language spoken at home.

Enrolments by University

Medicine is taught at nine state capital city universities plus the regional University of Newcastle, and the proportion of women enrolled varies from between 42% to 60%. What is the explanation for this wide variation between Australian medical schools? Table 1 summarises this situation.

Table 1: Medical Course Enrolments by Sex and University - 1996

University	Female	Male	Total	% Female	% Austn born
Sydney	363	497	860	42%	42%
New South Wales	374	520	894	42%	51%
Melbourne	455	638	1,093	42%	58%
Adelaide	264	342	606	44%	57%
Western Australia	341	352	693	49%	51%
Queensland	422	438	860	49%	72%
Flinders	127	121	248	51%	71%
Monash	445	397	842	53%	70%
Tasmania	158	133	291	54%	79%
Newcastle	200	134	334	60%	82%
Total	3,149	3,572	6,721	47%	60%

With the exception of the University of Western Australia, there is a marked inverse relationship between the proportion of female medical students and the proportion of medical students born in Australia. One factor common to the lower rates of access for women in medicine at some universities is the country of birth of recently arrived medical students.

Table 1 shows that there are more female than male medical students at the Universities of Tasmania and Newcastle, and Flinders and Monash Universities. **These four universities, with the highest proportions of women in their medical courses, also tended to have the higher rates of Australia-born students.** On the other hand, the Universities of Sydney and New South Wales, with higher proportions of overseas-born medical students have the lowest proportions of women. The Universities of Melbourne and Adelaide have 57% and 58% respectively of their medical students born in Australia, but still have a lower than average representation by women. The Universities of Queensland and Western Australia both have above-average numbers of women in medicine (49%), but rather different proportions of their medical students were born in Australia: 72% for Queensland and 51% for Western Australia.

Enrolments by Country of Birth

Taking the analysis a step further, it can be shown that among overseas-born medical students, country of birth is also an important factor for women enrolling in medicine. Table 2 shows wide disparity between country of birth and numbers of female medical students.

Table 2: Medical Course Enrolments by Sex and Country of Birth (1996)

Country of birth	Female	Male	Total	% Female
Australia	1,980	2,055	4,035	49%
Sri Lanka	46	40	86	53%
China	31	31	62	50%
Singapore	66	70	136	49%
India	36	52	88	41%
Taiwan	59	85	144	41%
Malaysia	192	288	480	40%
Hong Kong	124	191	315	39%
Vietnam	122	205	327	37%
South Korea	18	46	64	28%
Other Asia	52	92	144	36%
Asia	746	1,100	1,846	40%
UK	144	128	272	53%
Other Europe	79	80	159	50%
Europe	223	208	431	52%
New Zealand	38	27	65	58%
South Africa	43	35	78	55%
USA and Canada	40	41	81	50%
Iran	23	30	53	43%
Other Africa	19	31	50	38%
All other countries	37	45	82	45%
Other	200	209	409	49%
Total	3,149	3,572	6,721	47%

The table indicates that Australia-born students constituted the majority of medical undergraduates (4035 or 71%). Of these 4035 students, 49% were women. In particular, it can be seen that of medical students born in Europe, women made up 52% (223 out of 431), but only 40% of those born in Asia (746 out of 1846). Closer examination can link this factor back to the proportions of women in medicine at each university. For example, among the universities with higher proportions of overseas-born medical students, the Universities of NSW and Sydney had large numbers of Hong Kong-born and Vietnam-born students in their medical student enrolments, and the University of Melbourne had relatively large numbers of Malaysia-born and Vietnam-born students. However, in the case of the University of Western Australia, which appears to run against the pattern of other universities, overseas-born students were drawn heavily from South Africa and Europe, particularly the United Kingdom of Great Britain (UK), rather than from Asian countries.

Readers with an interest in the country of birth composition of Australia's medical students in a context other than gender equity should read Betts' paper (Betts, 1994). Among other things, he suggests that the relative performance of overseas-born students in gaining access to medical places is a good indicator of migrant achievement in Australia (Betts, p. 24).

Enrolments by language spoken at home

The idea that country of birth could be a 'barrier' to women's access to medical training is to some extent supported by an analysis of students' language spoken at home. Speaking a language other than English at home does not correlate directly to having been born overseas, because some immigrants are English speakers, and there are large numbers of second generation students who speak a non-English language at home. Medical course enrolments by language spoken at home are summarised in Table 3.

As can be seen, women comprise 49% of English speakers. For other language groups, there is a wide variation in patterns of access to medicine. Within Asian language speakers, women comprise only 41% of medical course enrolments. For European language speakers, 44% are women, but this average masks wide variations. In particular, the Greek- and Italian-speaking populations, both of which are primarily second generation, present particularly low female access rates. As has been noted before, these two language groups are particularly under-represented in higher education overall (Dobson, Birrell and Rapson, 1996).

Table 3: Medical Course Enrolments by Sex and Language Spoken (1996)

Language	Female	Male	Total	% Female
English	2,349	2,427	4,776	49%
Chinese	385	529	914	42%
Hindi	14	20	34	41%
Vietnamese	92	160	352	37%
Tamil	21	36	57	37%
Korean	21	44	65	32%
Other Asian	74	87	161	46%
Asian	607	876	1,483	41%
Polish	17	15	32	53%
Russian	16	18	34	47%
Greek	33	53	86	38%
Italian	8	20	28	29%
Other European	132	171	303	44%
European	132	171	303	44%
Middle Eastern	50	89	139	36%
Other non-English	10	6	16	63%
No information	1	3	4	25%
Total	3,149	3,572	6,721	47%

It is not difficult to argue that equity policy in Australian higher education oversimplifies the concept of disadvantage. Some of the designated equity groups have articulate lobbies to promote their interests, and

this applies particularly to women and non-English background students. Perhaps that is the reason that these groups are in fact over-represented in higher education overall.

People from low socio-economic status (SES) postcodes remain the most disadvantaged of the government's designated equity groups, even since the advent of higher education as a mass education system from the late 1980s. The low SES group also has no coherent lobby group. In 1996, low SES areas, which have been defined by the Australian Bureau of Statistics to include 25% of the overall population, supplied only about 14% of higher education enrolments in all courses, in contrast to the 38% of students coming from the 25% of postcodes designated as high SES. Table 4 shows the distribution of medical undergraduate enrolments, and it can be seen that SES is far more effective in limiting access to medicine than it is to other disciplines.

Table 4: Medical Course Enrolments by Sex and Socio-economic Status (1996)

Socio-economic status	Female	Male	Total	% Female	% Medical courses	% All courses
Low SES	284	318	602	47%	9%	14%
Middle SES	945	1,053	1,998	47%	30%	42%
High SES	1,785	2,063	3,848	46%	57%	38%
SES not known	135	138	273	49%	4%	5%
Total	3,149	3,572	6,721	47%	100%	100%

The 9% access result for students from low SES areas indicates just how much of a barrier is provided by socio-economic status. Having noted these disproportionate rates of access overall, it is interesting to note that women's representation in each group is fairly constant, being 47% from low and medium areas, and 46% from high SES postcodes. Although it is true that many immigrant groups, particularly those with non-English speaking backgrounds, live in low SES areas, it would seem likely that the reasons for low access by women from many non-English language groups lie within the cultural dynamics which pervade those country of birth or language communities.

Is there an issue in all this? Arguably medical courses should contain at least a representative proportion of female students, but it needs to be noted that there are variables other than sex to be considered. In the broader context of numbers of medical practitioners in the community, it is necessary to realise that there may be more involved than a straightforward sex distribution to be taken into account.

References

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