Matters arising

Risks of complaints and adverse disciplinary findings against international medical graduates in Victoria and Western Australia

Concerned for the wellbeing of international medical graduates, a diverse group of medical professionals respond strongly to research showing that this group attracts more complaints than their Australian-trained colleagues

To the Editor: In a recent article,[1] Elkin and colleagues concluded that, compared with Australian-trained doctors (ATDs), international medical graduates (IMGs) posed a greater risk of attracting complaints to medical boards. However, we think the conclusion is not supported by the data, and might have been compromised by the analytical methods used.

Box 1 of the research article[1] shows that IMGs accounted for 37% of the total number of doctors, but were involved in 30% of complaints, suggesting that the risk of complaints among IMGs was lower than among ATDs. Indeed, in a reanalysis of the data, we found that the rate of complaints against IMGs was 25% lower ($P<0.001$) than that for ATDs (Box).

The logistic regression used by the authors is suboptimal for count and rate data, which are likely to follow the Poisson distribution. We reanalysed the data using a Poisson regression model assuming similar durations of practice and found that the rate of complaints was highly dependent on the language background of IMGs (Box). For instance, compared with the complaint rate against ATDs, the complaint rate among IMGs whose countries list English as an official language was significantly lower (34%; $P<0.001$), but was not lower among IMGs from non-English speaking countries ($P=0.098$). Furthermore, among IMGs whose language requirements may have been waived by the medical board, the rate of complaints was substantially lower than among ATDs (46%; $P<0.001$).

In summary, our reanalysis of the data suggests that compared with ATDs, IMGs had a lower rate of complaints against them.

Nguyen D Nguyen Resident Medical Officer,[1] and Visiting Scientist[2]

Tran V Nguyen NHMRC Senior Research Fellow[2]

1 St Vincent's Hospital, Sydney, NSW.

2 Musculoskeletal Diseases Division, Garvan Institute of Medical Research, Sydney, NSW.

n.nguyen@garvan.org.au

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1 Elkin K, Spittal MJ, Studdert DM. Risks of complaints and adverse disciplinary findings against international medical graduates in Victoria and Western Australia. *Med J Aust* 2012; 197: 448-452. ❑

Rate ratio of complaints against international medical graduates (IMGs) compared with Australian-trained doctors (ATDs)*

	Rate ratio (95% CI)	*P*
IMGs v ATDs	0.75 (0.71–0.79)	< 0.001
Analysis by official language		
English†	0.66 (0.62–0.71)	< 0.001
Language other than English	0.94 (0.86–1.01)	0.098
Analysis by English requirement		
Waived‡	0.54 (0.50–0.59)	< 0.001
Certificate required	0.95 (0.89–1.01)	0.126

* The analysis was based on the Poisson regression model using data presented in Box 1 of the original research article.[1] † Countries where English is considered an official language include United Kingdom/Ireland, South Africa, New Zealand, India, Nigeria, Pakistan, the Philippines and Singapore. ‡ Countries for which the requirement for an English language proficiency certificate may be waived include South Africa, New Zealand and United Kingdom/Ireland. ◆

To the Editor: The article by Elkin and colleagues[1] has certainly reheated the long-simmering debate about bringing highly trained international medical practitioners from other countries to provide health care in Australia. Yet, it does not discuss the clinical and cultural acclimatisation they need. There are many moral and social issues associated with condemning an IMG without helping them to adapt to their locality. The study indicates that an effective orientation process of integration for individual doctors from overseas is needed.

Australia actively recruits doctors from overseas on limited registration to provide adequate services in rural and remote areas. These doctors have limited access to Medicare, to free public education for their family members and to other services that Australian residents enjoy. This is not conducive to good medical practice.

IMGs are required to pass a series of examinations that test their language and technical competency, but this does not guarantee employment. Supervised positions, vital for clinical competency, are scarce for these doctors. Most high-level governance and administrative positions do not include IMGs who could represent other IMGs in deciding policy matters. Furthermore, complaints against IMGs appear to be more likely to attract publicity than similar cases involving local graduates, which affects their reputation.

> “There are many moral and social issues associated with condemning an IMG without helping them to adapt to their locality”
>
> Chaturvedi

Lastly, the countries from which IMGs have come, many of them less privileged than Australia, have significantly invested in their training. In proper acknowledgement of this, they should be able to work here as doctors. The path of professional development of IMGs should be monitored by the government to ensure this is possible. The Australian Indian Medical Graduates Association strongly objects to the current trend for IMGs in Australia to remain wastefully unemployed or underemployed for prolonged periods, and considers this trend to be unethical and inequitable.

Shailja Chaturvedi President

Australian Indian Medical Graduates Association, Sydney, NSW.

admin@aimga.org.au

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1 Elkin K, Spittal MJ, Studdert DM. Risks of complaints and adverse disciplinary findings against international medical graduates in Victoria and Western Australia. *Med J Aust* 2012; 197: 448-452. ❑

To the Editor: Elkin and colleagues acknowledged that “most [international studies] have found no association” between acquiring a medical degree overseas and being the subject of a complaint;[1] however, their principal findings — which differ from these other studies — require care in interpretation.

In the study by Elkin et al, the “clinical specialty was missing” for 75%

of registered doctors. Yet, certain medical specialties are associated with a higher risk of attracting complaints. In one US study, surgeons attracted significantly more lawsuits than non-surgeons.[2] Therefore, a disproportionate number of complaints involving international medical graduates (IMGs) could have been owing to working in, for instance, surgical specialties.

Further, neither "race" nor ethnicity was examined. In an analysis of 14 314 doctors in the United States, non-white professionals were at significantly greater risk of being disciplined than their white counterparts.[3] Similar findings for the United Kingdom have been published.[4] The authors of the British study referred to "possible inequalities and unfairness", including racism, in official procedures involving doctors from ethnic minorities and IMGs. A recent parliamentary inquiry into the registration processes in Australia noted that while "IMGs generally have very strong community support, they do not always receive the same level of support from the institutions and agencies that accredit and register them".[5]

Elkin et al analysed data from only two Australian states. The authors of a study conducted in California not only revealed that certain personal characteristics and medical specialties were associated with increased disciplinary action, but also cautioned that those findings could not be extrapolated to the entire country.[6]

Carlos Zubaran Conjoint Professor

School of Medicine, University of Western Sydney, Sydney, NSW.

zubaran_jr@yahoo.com

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1 Elkin K, Spittal MJ, Studdert DM. Risks of complaints and adverse disciplinary findings against international medical graduates in Victoria and Western Australia. *Med J Aust* 2012; 197: 448-452.

2 Hickson GB, Federspiel CF, Pichert JW, et al. Patient complaints and malpractice risk. *JAMA* 2002; 287: 2951-2957.

3 Khaliq AA, Dimassi H, Huang CY, et al. Disciplinary action against physicians: who is likely to get disciplined? *Am J Med* 2005; 118: 773-777.

4 Humphrey C, Hickman S, Gulliford MC. Place of medical qualification and outcomes of UK General Medical Council "fitness to practise" process: cohort study. *BMJ* 2011; 342: d1817.

5 House of Representatives Standing Committee on Health and Ageing. Lost in the labyrinth: report on the inquiry into registration processes and support for overseas trained doctors. Canberra: Parliament of the Commonwealth of Australia, 2012. http://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives_Committees?url=haa/overseasdoctors/report.htm (accessed Feb 2013).

6 Kohatsu ND, Gould D, Ross LK, et al. Characteristics associated with physician discipline: a case-control study. *Arch Intern Med* 2004; 164: 653-658. ❑

To the Editor: In the article by Elkin and colleagues,[1] the conclusions drawn from the data analysed do not appear to be adequately supported. It should be noted that only 30% of complaints against doctors had a final hearing, and the risk of adverse findings (ie, where the doctor was found to be guilty) was not analysed by country of origin. Although doctors from certain countries attracted higher rates of complaints, it is inappropriate to label them as "high risk" in the absence of data on adverse findings. It is conceivable that the complaints against the so-called low-risk groups (typically, from English-speaking countries other than Australia, such as the United Kingdom, New Zealand and similar countries) were less likely to be simply driven by cultural misunderstanding or racism and might therefore have been based on actual deficiencies in practice. This, in reality, could possibly be driving the significantly higher risk associated with international medical graduates (IMGs) as a whole in terms of the rate of adverse findings. In addition, a larger proportion of complaints attracted by the so-called high-risk groups may eventually be proven to be unsubstantiated. Therefore, this study is unable to prove whether the professional practice of the group labelled as high-risk was concerning at all.

We agree with the authors that more research is needed on underlying causes for complaints against IMGs and Australian medical graduates. Ideally, such a study would use data on complaints adjudicated by board members blinded to the doctor's country of training. Equally important would be creating more opportunities for acculturation and supervised training for IMGs, especially in the initial period of their practice in Australia.

Snehal P Akre Member[1]

Amit C Achhra Research Fellow[2]

1 Australian Indian Medical Graduates Association, Sydney, NSW.

2 Kirby Institute, University of New South Wales, Sydney, NSW.

aachhra@kirby.unsw.edu.au

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> "a disproportionate number of complaints involving IMGs could have been owing to working in ... surgical specialties"
>
> Zubaran

To the Editor: While using medical board data for research purposes is very welcome, I have some reservations about ethical aspects of the study by Elkin and colleagues.[1] Prospective ethics review of human research is intended to protect participants from foreseeable and avoidable harm. I suggest that, in this instance, avoidable harm has resulted, through generalised adverse and possibly unfair publicity about particular groups of international medical graduates.

Although identifying "complainant factors" as one source of potential bias, the authors interpreted the data as if this potential bias could be ignored. The surprising difference in complaint frequency between Victoria and Western Australia might say something about these complainant factors, but this is left unremarked. In addition, they failed to identify another potential source of bias in the outcome data, namely the potential for medical board adjudicators to assess complaints in a prejudiced way. Without knowledge of the nature of the complaints, the investigative findings and the outcomes that resulted, readers cannot assess the possible existence and impact of such biases.

A claim is made that complaints represent a form of sentinel-event surveillance system that flags problems, which may be true for investigated and substantiated complaints. But this cannot be asserted when, in this study, 70% of complaints were not investigated and of the 1606 that were investigated, 1233 apparently did not result in an adverse finding.

In my view, at the very least, the study should not have been published in the format chosen. Any important potential conclusions relevant to the regulator and the wider medical profession need not have identified specific countries of origin. I feel deeply for the vast majority of doctors in the identified so-called high-risk groups who have never been the subject of a

complaint. I hope that the authors, the human research ethics committee involved, the reviewers and your editorial team will, after reflection, act to ensure better participant protection in the future.

Kerry J Breen Adjunct Professor

Department of Forensic Medicine, Monash University, Melbourne, VIC.
kerry.breen@bigpond.com

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In reply: Nguyen and Nguyen question our finding that international medical graduates (IMGs) are at higher risk of attracting complaints than Australian-trained doctors (ATDs),[1] based on recalculations using the descriptive statistics we reported. They infer, from the fact that IMGs accounted for 37% of doctors and 30% of total complaints, that IMGs were at lower risk of complaints.

Comparisons of simple proportions as above mislead for a couple of reasons. First, doctors were observed for different periods of time — accounted for by conducting the analysis at the doctor-year level. Nguyen and Nguyen's reanalysis rests on the incorrect assumption that duration of follow-up was comparable between the two groups. On average, observation periods for IMGs were significantly shorter than those for Australian-trained doctors. Secondly, comparisons of simple percentages do not account for confounders — characteristics that differ systematically between IMGs and Australian-trained doctors and are also associated with the probability of complaints. We adjusted for several of these characteristics with multivariate analysis. Nguyen and Nguyen's calculations do not take them into account.

Nguyen and Nguyen's other criticism is that we should have modelled the incidence of complaints as a count variable in Poisson regression, rather than as a binary variable in logistic regression. A count model is not clearly the superior method for this analysis, but it is a reasonable alternative. That is why we used one. We reran our analyses using negative binomial regression, a close cousin of Poisson regression. This sensitivity analysis produced very similar results, as reported in our original article and Appendix. Nguyen and Nguyen's Poisson calculations may have produced different results for many reasons, including use of simple proportions rather than individual-level data, their erroneous assumption about equal follow-up time, and no adjustment for confounders.

Chaturvedi argues that there are practical and moral imperatives to better support IMGs in acclimatising to work and life in Australia. We agree. A recent parliamentary inquiry[2] into overseas-trained doctors recognised this need, as Zubaran notes, and has called for immediate action.

Akre and Achhra object to our use of the term "high risk". We used this term in a specific way — to denote groups of doctors with significantly higher odds of complaints and adverse findings — and it is accurate. Additionally, Akre and Achhra speculate that the higher risk of adverse findings observed for IMGs as a whole may have been driven by IMGs from English-speaking countries with relatively "severe" complaints against them. We did not report IMGs' risks of adverse findings by country of training because the data were sparse (373 adverse findings across 21 specified countries), confidence intervals were wide, and the analysis was underpowered. However, the data do not support Akre and Achhra's theory. We checked by running a multivariable model (with the same specifications as the complaints model) to predict adverse findings among doctors from the three English-speaking countries and three non-English-speaking countries (excluding Germany) with the most IMGs. Odds ratios (ORs) for doctors trained in the United Kingdom/Ireland (OR, 1.37; 95% CI, 0.66–2.85), New Zealand (OR, 0.69; 95% CI, 0.24–1.94) and South Africa (OR, 0.92; 95% CI, 0.33–2.59) were similar to those produced by the original risk-of-complaints model, as were ORs for IMGs from India (OR, 1.94; 95% CI, 1.17–3.23), Sri Lanka (OR, 1.93; 95% CI, 0.77–4.82) and Egypt (OR, 1.93; 95% CI, 0.87–4.25).

Breen notes that complaints to medical boards are uncommon, often do not result in adverse findings, and may stem from complainant-related biases. Our article addressed each of those points. Breen also suggests that reporting complaint risks by country of training was unnecessary and ethically questionable. This strong claim is difficult to square with the standard public health approach. Research and prevention activities are routinely targeted at certain groups of people. Consider, for example, efforts to combat youth suicide, falls among the elderly, obesity in low-income households, HIV infection among injecting drug-users and renal disease in Indigenous populations. Such targeting is widely accepted and occurs because foundational research has previously determined that these subgroups faced disproportionately high risks.

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>
> Studdert et al

Why should complaints to medical boards be approached differently? Breen suggests that uncertainty about causal factors, particularly biases in complaint-filing behaviour and medical board adjudications, demands it. These and other factors (eg, lack of support, cultural misunderstandings) warrant exploration, and may help explain IMGs' heightened risks. However, disentangling causal factors will take years and will require many studies. Publication of risk differences should not wait for this. Where would the impetus for such further research come from without initial identification of risk differences? Being less than candid about our findings would have done a disservice to IMGs and their patients.

David M Studdert Professor and ARC Laureate Fellow[1,2]

Matthew J Spittal Senior Research Fellow[1]

Katie Elkin PhD Candidate[1,2]

1 Melbourne School of Population Health, University of Melbourne, Melbourne, VIC.

2 Melbourne Law School, University of Melbourne, Melbourne, VIC.
d.studdert@unimelb.edu.au

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2 House of Representatives Standing Committee on Health and Ageing. Lost in the labyrinth: report on the inquiry into registration processes and support for overseas trained doctors. Canberra: Parliament of the Commonwealth of Australia, 2012. http://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives_Committees?url=haa/overseasdoctors/report.htm (accessed Feb 2013). ❑