Perceived practice change in Australian doctors as a result of medicolegal concerns

Louise M Nash, Merrilyn M Walton, Michele G Daly, Patrick J Kelly, Garry Walter, Elizabeth H van Ekert, Simon M Willcock and Christopher C Tennant

Medicolegal concerns can prompt changes to the practice of medicine that can be both potentially beneficial and not beneficial to patient care.1-16 There is international evidence from the United Kingdom, the United States, Japan, Canada and New Zealand of concerns about medicolegal issues leading to excessive referrals,3,7,8,11 excessive ordering of tests3,7 and use of imaging technology,7 excessive prescribing of medication,7,11 and avoidance of certain patients or procedures.5,7,13 Potentially beneficial changes include that medicolegal concerns can lead to more information being given to patients3,7 and to more reflective practice, greater sensitivity to societal and professional expectations, and willingness to make system improvements,13 such as developing audit procedures and better record keeping.5

What is the Australian situation regarding beliefs and perceived changes in practice due to medicolegal concerns? In an earlier Australian general practitioner study, we also found evidence of practice change.16

In this article, we report new Australian evidence from a large, broad sample of Australian doctors comprising specialists, GPs and trainees. We also examine whether perceived behaviour and beliefs differ between doctors who have experienced a medicolegal matter and those who have not.

METHODS

In September 2007, a questionnaire was mailed to all specialists (obstetricians, gynaecologists, physicians, surgeons, anaesthetists, psychiatrists, pathologists, radiologists, paediatricians, accident and emergency specialists), all registrars and specialists in training, and a sample of GP non-proceduralists insured with the medical insurance company UNITED (that company subsequently merged with another company). GP proceduralists were not included, as they had participated in our previous study. The random sample of 1865 non-procedural GPs was selected out of a possible 7275 non-procedural GPs who had not been invited to participate in the previous GP study. A summary of response rate per specialty has been published previously.17

Surveys were sent out with reply-paid envelopes for their return. Four weeks after the mail-out, a reminder letter and repeat questionnaire were sent to non-respondents.

The questionnaire covered demographic and practice details, and experience of medicolegal matters. It also canvassed doctors’ beliefs about medicolegal issues and their perceived changes in practice as a result of medicolegal concerns. The questionnaire was developed from key items in the literature,1,5,8,11,16 and was first used in a small study with the New South Wales Health Care Complaints Commission1, and further developed for a GP study.16

The items about perceived changes in practice behaviour due to medicolegal concerns are listed in Box 1. There were four response categories: less than usual, no change from usual, more than usual, and not applicable. A series of statements about beliefs and understanding of the law as it relates to medicolegal issues are listed in Box 2. Response categories for these items were: “strongly disagree”, “disagree”, “agree” and “strongly agree”. Items on the perceived influence of medicolegal issues on career choice and on how doctors relate to patients are shown in Box 3 and Box 4, respectively.

Response categories for these items were “yes” or “no”.

The questionnaire asked if doctors had ever been the subject of one of the following medicolegal matters: a claim for compensation for damages; a complaint to a health care complaints body; a medical registration services inquiry; a complaint before an anti-discrimination board; a coronial inquiry; a Medicare Australia/Health Insurance Commission (HIC) inquiry; a hospital dispute; a hospital investigation; a pharmaceutical services inquiry; a complaint before an anti-discrimination board; a coronial inquiry; a criminal charge; and a patient complaint direct to the doctor. Self-report data were
1 Perceived change in practice behaviour due to concerns about medicolegal negligence claims and complaints

<table>
<thead>
<tr>
<th>Item</th>
<th>All respondents</th>
<th>Respondents who had experienced MLM</th>
<th>Respondents who had not experienced MLM</th>
<th>Difference§ (95% CI)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide communication of risk to patients</td>
<td>70</td>
<td>1874 (66%)</td>
<td>1859</td>
<td>1278 (69%)</td>
<td>8 (5 to 12)</td>
</tr>
<tr>
<td>Order tests</td>
<td>116</td>
<td>2810 (55%)</td>
<td>1844</td>
<td>1047 (57%)</td>
<td>5 (1 to 9)</td>
</tr>
<tr>
<td>Put systems in place to track test results</td>
<td>340</td>
<td>1226 (48%)</td>
<td>1690</td>
<td>835 (49%)</td>
<td>5 (1 to 9)</td>
</tr>
<tr>
<td>Disclose uncertainty</td>
<td>65</td>
<td>1262 (44%)</td>
<td>1868</td>
<td>884 (47%)</td>
<td>9 (5 to 13)</td>
</tr>
<tr>
<td>Refer patients to specialists</td>
<td>368</td>
<td>1096 (43%)</td>
<td>1647</td>
<td>712 (43%)</td>
<td>-1 (-5 to 3)</td>
</tr>
<tr>
<td>Avoid a particular type of invasive procedure</td>
<td>598</td>
<td>931 (40%)</td>
<td>1575</td>
<td>660 (42%)</td>
<td>6 (2 to 10)</td>
</tr>
<tr>
<td>Put systems in place to identify non-attenders</td>
<td>580</td>
<td>909 (39%)</td>
<td>1557</td>
<td>645 (41%)</td>
<td>7 (3 to 12)</td>
</tr>
<tr>
<td>Consider every patient a potential litigant</td>
<td>79</td>
<td>1039 (37%)</td>
<td>1860</td>
<td>771 (41%)</td>
<td>14 (11 to 18)</td>
</tr>
<tr>
<td>Put systems in place to audit practice</td>
<td>320</td>
<td>906 (35%)</td>
<td>1722</td>
<td>618 (36%)</td>
<td>3 (-1 to 7)</td>
</tr>
<tr>
<td>Avoid particular obstetric procedure</td>
<td>2109</td>
<td>277 (34%)</td>
<td>537</td>
<td>207 (39%)</td>
<td>13 (6 to 20)</td>
</tr>
<tr>
<td>Relate empathically to patients</td>
<td>77</td>
<td>730 (26%)</td>
<td>1861</td>
<td>523 (28%)</td>
<td>7 (4 to 10)</td>
</tr>
<tr>
<td>Prescribe medication</td>
<td>277</td>
<td>285 (11%)</td>
<td>1738</td>
<td>194 (11%)</td>
<td>1 (-1 to 4)</td>
</tr>
<tr>
<td>Advise patients of complaints policy</td>
<td>294</td>
<td>255 (10%)</td>
<td>1725</td>
<td>171 (10%)</td>
<td>1 (-2 to 3)</td>
</tr>
</tbody>
</table>

MLM = medicolegal matter.

* Results relate to participants who agreed that they performed the behaviour listed in the item column more than usual when asked: “Do concerns about medical negligence/complaint cause you to [item] less than usual, no change from usual, more than usual or not applicable?”. † The number who responded to the item (excluding “not applicable” responses). § The number (%) who agreed that they had changed their practice behaviour in accordance with the statement. Percentage of respondents with experience of MLM who changed their behaviour more than usual minus the percentage of respondents with no experience of MLM who changed their behaviour more than usual.

Statistical analysis

Response categories were dichotomised according to whether or not doctors had experienced medicolegal matters, and differences between respondents who had and had not experienced medicolegal matters were assessed using Pearson’s χ² tests. Given the large size of our sample, very small differences between those who had and had not experienced medicolegal matters could be detected, and consequently, differences were considered statistically significant at P ≤ 0.01. The estimated differences between proportions and corresponding 95% confidence intervals are also presented.

Statistical analysis was undertaken using SPSS, version 15 (SPSS Inc, Chicago, Ill, USA).

Ethics approval

Approval for the study was granted through ethics committees of the Northern Sydney Central Coast Area Health Service and the University of Sydney, and the Board of UNITED (now Avant). Anonymity and confidentiality of survey responses and Avant membership and data were protected at all times.

RESULTS

Eight thousand five hundred doctors were invited to participate in the study. One hundred and forty declined, leaving 8360 who received the survey. Two thousand nine hundred and ninety-nine responded, representing a 36% response rate (2999/8360). Experience of medicolegal matters was self-reported by 1902 of 2942 respondents (65%), with 426 (14%) having a current matter. The two most common medicolegal matters were claims for compensation (31%) and complaints to a health care complaints body (30%), and the least common were criminal charges (< 1%), pharmaceutical services inquiries (1%), discrimination board complaints (1%) and disciplinary hearings (2%).

A comparison of respondents with non-respondents according to age, sex, specialty and history of medicolegal matters derived from Avant data found minor differences only. Respondents were slightly older (mean age, 51.7 years v 50.3 years), proportionally fewer men responded (71% v 74%), and respondents were slightly more likely than non-respondents to have been involved in claims for compensation (28.0% v 23.0%), complaints to a health care complaints body...
RESEARCH

2 Beliefs about medicolegal issues*  

<table>
<thead>
<tr>
<th>Item</th>
<th>All respondents</th>
<th>Respondents who had experienced MLM</th>
<th>Respondents who had not experienced MLM</th>
<th>Differencea (95% CI)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>All doctors make mistakes</td>
<td>2933</td>
<td>2865 (99%)</td>
<td>1896</td>
<td>1855 (98%)</td>
<td>1 (-1 to 2)</td>
</tr>
<tr>
<td>Inadequate communication is a factor in most mistakes</td>
<td>2929</td>
<td>2739 (94%)</td>
<td>1892</td>
<td>1744 (92%)</td>
<td>1 (-4 to 2)</td>
</tr>
<tr>
<td>My awareness of risks of medical negligence has increased in recent years</td>
<td>2928</td>
<td>2678 (91%)</td>
<td>1895</td>
<td>1741 (92%)</td>
<td>1 (-1 to 3)</td>
</tr>
<tr>
<td>I feel comfortable discussing my mistakes with my colleagues</td>
<td>2930</td>
<td>2319 (79%)</td>
<td>1894</td>
<td>1494 (79%)</td>
<td>-1 (-4 to 2)</td>
</tr>
<tr>
<td>Doctors are encouraged to report their medical errors</td>
<td>2924</td>
<td>1775 (61%)</td>
<td>1892</td>
<td>1138 (60%)</td>
<td>-2 (-5 to 2)</td>
</tr>
<tr>
<td>Professional standards should be set solely by the medical profession</td>
<td>2919</td>
<td>1694 (58%)</td>
<td>1889</td>
<td>1114 (59%)</td>
<td>3 (-6 to 11)</td>
</tr>
<tr>
<td>The law requires me to make perfect decisions</td>
<td>2922</td>
<td>1577 (54%)</td>
<td>1889</td>
<td>1062 (56%)</td>
<td>6 (3 to 10)</td>
</tr>
<tr>
<td>Medical mistakes are rare</td>
<td>2931</td>
<td>549 (19%)</td>
<td>1894</td>
<td>372 (20%)</td>
<td>3 (0 to 5)</td>
</tr>
<tr>
<td>An apology to a patient implies an admission of liability</td>
<td>2920</td>
<td>460 (16%)</td>
<td>1886</td>
<td>319 (17%)</td>
<td>3 (1 to 6)</td>
</tr>
<tr>
<td>Patients are likely to sue a doctor who tells them about a mistake</td>
<td>2920</td>
<td>341 (12%)</td>
<td>1887</td>
<td>250 (13%)</td>
<td>4 (2 to 7)</td>
</tr>
<tr>
<td>Only unprofessional or incompetent doctors get sued</td>
<td>2929</td>
<td>78 (3%)</td>
<td>1896</td>
<td>47 (2%)</td>
<td>-1 (-2 to 1)</td>
</tr>
</tbody>
</table>

MLM = medicolegal matter  
* Perceptions of mistakes, complaints and legal risk were assessed by asking respondents whether they strongly disagreed, disagreed, agreed or strongly agreed with the statements in the item column. † The number who responded to the item. ‡ The number (%) who agreed or strongly agreed with the statement. § Percentage of respondents with experience of MLM who agreed or strongly agreed with the statement minus the percentage of respondents with no experience of MLM who agreed or strongly agreed with the statement.

Perceived change in practice behaviour due to concerns about medical negligence claims and complaints

The proportion of doctors who reported altering their practice behaviour relating to a particular item “more than usual” due to concerns about medical negligence and complaints is reported in Box 1. A varying number of respondents reported that items were not applicable, as shown. The table in Box 1 lists the items in descending order of the frequency with which they were reported to influence practice by all respondents, and compares doctors who had and had not experienced a medicolegal matter.

Box 1 shows agreement among respondents with statements about medicolegal issues. The proportion agreeing includes those who strongly agreed and agreed. Respondents who had experienced a medicolegal matter were more likely to agree that “the law requires me to make perfect decisions” and “patients are likely to sue a doctor who tells them about a mistake”, but less likely to agree that “inadequate communication is a factor in most mistakes”.

Perceived influence of medicolegal issues on career choices

Respondents who had experienced a medicolegal matter were more likely to agree with all four statements on career choices listed in Box 3, compared with those with no experience of a medicolegal matter (P < 0.001).

Perceived influence of medicolegal issues on how doctors relate to patients

Respondents with experience of a medicolegal matter were more likely to agree with all four statements listed in Box 4 about relating to patients, compared with those with no experience of a medicolegal matter (P < 0.001).

DISCUSSION

We found that Australian doctors report that concerns about medicolegal action changes the way they would normally practise medi-
Our findings concur with most of those in international studies, and provide new information by also comparing doctors who have experienced a medicolegal matter with those who have not.

The increase in referral rates reported by 43% of our respondents is lower than the rate in the US Common Good study (74%) and the UK GP study (64%), although this reflects the difference between the samples — the UK study included only GPs while ours included mainly specialists. The costly increase in test ordering reported by 55% of our sample was similar to the rate in the UK study (60%), but lower than that in the US Common Good study (79%). Unnecessary prescribing is both expensive and potentially dangerous. However, only 11% of our sample reported this practice. This compares favourably with the UK GP study, in which 29% perceived that they prescribed unnecessary drugs, and the US Common Good study, in which 41% believed they prescribed more medication for fear of litigation. It is possible that the campaigns for safe prescribing over the past decade in Australia may have had a positive effect on prescribing practices.

A significant number of doctors with experience of a medicolegal matter had more negative attitudes towards their work and in their relationships with their patients. Concerns about medicolegal issues caused 33% of the total cohort to consider giving up medicine, 32% to consider reducing hours of work, 40% to consider retiring early, and 18% to feel more emotionally distant from patients. All these were significantly more common in doctors with experience of a medicolegal matter compared with those with no such experience. Similarly, changes in relating to patients were reported in a study of New Zealand doctors who had experienced complaints, with a reduction in both trust of patients (38% in the short term and 32% in the long term) and sense of goodwill towards patients (29% in the short term and 18% in the long term). The US Common Good study reported that 38% of respondents thought the fear of malpractice made their relationship with patients less personal.

Doctors reported some improvements of care due to medicolegal concerns, such as improved communication of risk to patients, which was reported by 66%. The need to disclose uncertainty surrounding diagnosis or treatment was increased in 44% of respondents, with a 9% greater difference in those who had experienced a medicolegal matter compared with those who had not. There were perceived improvements to quality and safety measures due to medicolegal concerns, with better systems for tracking test results reported by 48%, better methods to identify non-attenders reported by 39% and routine auditing of clinical practice reported by 35%.

There was near universal agreement (98%) that doctors make mistakes, yet 54% believed that the law required them to make perfect decisions. This proportion was significantly higher among doctors with, than among those without experience of a medicolegal matter. Yet the law does not require perfection. The majority decision of the High Court of Australia in Rogers v Whitaker established that “The law imposes
on a medical practitioner a duty to exercise reasonable care and skill in the provision of professional advice and treatment.19

Nineteen per cent of respondents believed that medical mistakes are rare. This is at odds with the patient safety literature which highlights the extent of adverse events and negligence in many developed countries.10-23

Our study has some limitations. The response rate of 36% was relatively low, but this rate is in keeping with some other studies of medical practitioners.24 This study is the largest of its kind in Australia, and one of the largest in the world. The respondent sample represents 5% of the Australian medical labour workforce, 3% of all GPs and about 10% of each specialty group (ranging from 9% for physicians to 14% for obstetricians/gynaecologists).25 A weighted analysis was conducted to adjust the estimated percentages, according to the proportions of GPs and specialty respondents based on Australian workforce data.25 Almost all weighted percentages were very similar to the unweighted percentages — they differed by less than 3%. There were three exceptions, all with respect to the perceived change in behaviour due to concerns about medical negligence and complaints (Box 1). Ordering tests was estimated to be 60% (compared with 55%); tracking test results was estimated to be 53% (compared with 48%); and referring patients to specialists was estimated to be 51% (compared with 43%). These changes mainly reflect the higher weighting that was given to GP responses.

This Australian study, similar to studies in the US, Canada, UK, Japan and New Zealand, indicates that doctors perceive that their concerns about medicolegal issues impact on their practice of medicine. Also similar to international studies, many Australian doctors perceive they make increased referrals and order tests due to concerns about medical negligence and complaints. However, there is considerably less impact on the prescribing of medications in Australia.

Doctors’ experience of a medicolegal matter may lead them to consider reducing their hours of work and the years they intend to practise. For some doctors, there is a greater reserve in dealing with patients. A significantly higher number of doctors with experience of a medicolegal matter state their intention to give upmedicine, reduce their working hours or retire early. Whether they actually did was not investigated by this study.

Appropriate education for doctors would include knowledge of the medicolegal environment and an understanding of how medicolegal concerns may weaken sound clinical judgement, cause unnecessary costs, burden health care resources, and constrain improvements in health care delivery.15 Targeted training in patient safety and medicolegal aspects of medical practice will help doctors to be better informed and to better understand how such issues influence their judgement and decisionmaking.

ACKNOWLEDGEMENTS

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COMPETING INTERESTS

None identified.

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