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GPs' concerns about medicolegal issues

How it affects their practice

Background
General practitioners' concerns about medicolegal issues have been shown to influence the practice of medicine. This research looks at GPs' beliefs about medicolegal issues and how medicolegal concerns affect their practice.

Methods
A descriptive comparative design was used. A cross sectional self report survey was sent to 1239 GPs, 566 responded (46% response rate). Responses were considered as a group, and then comparisons were made between those who had experienced a medicolegal matter and those who had not. This data was sourced from surveys and medicolegal insurer records.

Results
General practitioners with previous medicolegal experiences were more likely than their colleagues to report believing the law required them to make perfect decisions and that medicolegal factors made them consider early retirement from medicine. They were also less likely to believe that inadequate communication is a factor in most complaints. More than half the GPs reported having made practice changes due to medicolegal concerns in the following areas: test ordering (73%); specialist referrals (66%); systems to track test results (70%); and communication of risk to patients (68%). Other changes were reported less frequently.

Discussion
This study found that GPs' concerns about medicolegal matters impact on their practise of medicine. While greater awareness of medicolegal issues may lead to positive impacts, the negative impact of their concerns is that some changes arise from anxiety about medicolegal matters rather than from the exercise of good clinical judgment.

General practitioners' concerns about a potential complaint, inquiry or lawsuit influences their practise of medicine in potentially positive ways such as developing audit procedures and better patient explanations; but also negatively such as increased prescribing of drugs, referrals and diagnostic testing.[1–9] These impact on the quality and cost of health care.

Defensive medicine occurs when practice is governed by the fear of medicolegal actions rather than sound medical judgment. A review of the effects of the medical liability system in Australia, the United Kingdom and the USA, found evidence of defensive medicine in the UK and the USA, but a lack of Australian data.[10] In a UK study of 500 randomly selected GPs with 300 respondents (60% response rate), 98% of respondents reported making some change in reaction to the possibility of a complaint,[5] including increased referral (64%), increased follow up (64%), increased diagnostic testing (60%), prescribing of unnecessary drugs (29%) and avoiding treatment of certain conditions (42%). Studdert's[7] 2003 survey to 1333 emergency doctors, radiologists and surgeons in Pennsylvania with 824 respondents (65% response rate), found that 92% of respondents modified diagnostic procedures and/or referring because of the threat of malpractice liability, and 43% reported using imaging when clinically unnecessary.

A Canadian survey of 148 primary physicians with 72 respondents (response rate 49%) found that 50% of respondents avoided certain procedures,[4] as did 28% of sued Chicago doctors in the 1980s.[9] However, more information was provided to patients by 80% of the Canadian respondents[4] and by 50% of UK GPs.[5]

The USA Common Good Fear of Litigation study interviewed 300 doctors, 200 nurses and 100 administrators. Doctors reported an increase in test ordering (79%), referrals (74%), and medication prescribing (41%); with near unanimous agreement that this increased health care costs.[8]

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Table 1. Medicolegal history of the respondents

Characteristic	No. (%)
Self reported medicolegal experiences of GPs (n=559)*	
Medicolegal assistance ever received	329 (59)
Respondents with a current medicolegal matter	71 (13)
Respondents with a past medicolegal matter	295 (53)
GPs who have experienced one or more of the following medico-legal matters (UNITED data, n=565)	250 (44)
Civil claims	145 (26)
Unlitigated claims**	36 (6)
Complaints	87 (15)
Medical Board inquiry	32 (6)
HIC claims	16 (3)
Coroners inquiry	15 (3)

Note: A medicolegal matter included the following: civil claim, unlitigated claim, complaint, Medical Board inquiry, HIC inquiry, disciplinary hearing, hospital dispute, pharmaceutical services inquiry, Medicare fraud inquiry, antidiscrimination inquiry, coroners inquiry, criminal charge

* 59% of respondents had sought medicolegal assistance for one of the above medicolegal matters, and this also Included matters with other insurance groups; some respondents may have included matters that may not have been considered by UNITED as a matter

** Unlitigated claim refers to a claim in which civil proceedings have not been commenced. The claim is made by the patient, or by a solicitor or another person instructed by the patient

Methods

A descriptive comparative design was used. A cross sectional self report survey was administered to GPs in May 2006. Responses were considered as a group, and comparisons made between those who had experienced a medicolegal matter and those who had not.

Sample

A total of 1499 GPs were selected from a list of all GPs insured with UNITED Medical Protection (UNITED), then the largest Australian medical insurance company (now Avant). The final sample included all 530 GPs classified by UNITED as proceduralists, and a random selection of 970 nonprocedural GPs from a total data base of 6479. Power analysis considering change in the psychological morbidity measures[11] determined the sample size required. UNITED insured 30% of Australian GPs.[13]

A two stage approach was used to ensure protection of confidential data. All selected GPs were informed of the study, including the use of historical data relating to medicolegal matters held by UNITED, and asked to complete a form indicating whether or not they wished to participate; 266 GPs (17%) chose not to participate.

Data and procedure

Data came from two sources. The survey data included demographic information, work practice details, current and past medicolegal matters with any medical defence organisation, and attitudes and change of practice in response to medicolegal concerns. The posted survey included a reply paid envelope, with a reminder letter 4 weeks later. The second data source was the UNITED database information on medicolegal matters for GPs who agreed to participate.

Measuring medicolegal matters

Medicolegal matters classification used UNITED criteria, with the survey asking about: compensation claim for damages, health care complaints body complaint, Medical Board inquiry, disciplinary hearing, Health Insurance Commission (HIC) inquiry, hospital dispute, pharmaceutical services inquiry, Medicare fraud inquiry, Antidiscrimination Board inquiry, Coronial inquiry, criminal charge and 'other'.

Respondents were asked whether they had ever received assistance from any medical defence organisation in any of these

medicolegal matters and whether the matters were 'current' or 'past' (closed).

Beliefs and changes to practice due to concerns about medicolegal issues

A previously piloted questionnaire was used regarding GPs' beliefs and understanding of the law as it relates to medicolegal issues.[6] Questions about changes in practice were drawn from key items in the literature. Respondents were asked: 'Do concerns about medical negligence/complaint cause you to...' and a series of items were listed relating to medical practice (*Table 1*).

Ethical considerations

Approval for the study was granted through Northern Sydney Central Coast Area Health Service and the University of Sydney Ethics Committees, and the UNITED Board. The survey covering letter indicated that de-identified data relating to medicolegal matters held by UNITED would be issued to the study team if the survey was returned.

Results

Respondent demographic characteristics and experience of medicolegal matters

Of the 1239 GPs surveyed, 566 responded (46% survey response rate, and 566/1499, 38% overall response rate); mean age was 53 years (SD=9.7); and 65% were male. Proceduralist GPs accounted for 32% of respondents. Mean hours worked per week was 40.9 hours (SD=15.1) and mean weeks worked per year was 46.4 weeks (SD=6.0). The medicolegal history of respondents is shown in *Table 1*.

Differences between study respondents and nonrespondents from UNITED data

Respondents were marginally older (M=52.80 years, SD=9.46) than nonrespondents (M=51.68 years, SD=9.87) ($t_{(1191)}$=1.99, p<0.05) and there was a higher proportion of females to males for respondents (35.8%) compared to nonrespondents (28.3%) (χ^2=7.85, df=1, p<0.01).

There were no significant differences in the proportion of survey respondents experiencing the key medicolegal events (claims,

Table 2. Beliefs about medicolegal issues (n=554)

Statement	% Agree* Total cohort (n=554)	% Agree MLM (n=326)	% Agree No MLM (n=228)	Significance**#
All doctors make mistakes	97	97	97	ns
Inadequate communication is a factor in most complaints	93	90	97	χ^2(1,n=550) = 8.52, p=0.004
My awareness of risks of medical negligence has increased in recent years	92	93	91	ns
I feel comfortable discussing my mistakes with my colleagues	76	77	74	ns
Professional standards should be set solely by the medical profession	70	69	71	ns
Doctors are encouraged to report their medical errors	70	71	70	ns
The law requires me to make perfect medical decisions#	64	68	59	χ^2(1,n=548) =4.32, p=0.038
Medicolegal factors make you consider retiring early from medicine	48	52	43	χ^2 (1,n=542) = 4.30, p=0.038
Medical mistakes are rare	21	19	24	ns
An apology to a patient implies an admission of liability	16	17	14	ns
Patients are likely to sue a doctor who tells them about a mistake	14	15	11	ns
Only unprofessional or incompetent doctors get sued	2	2	3	ns

Note: MLM = medicolegal matter which included the following: civil claim, unlitigated claim, complaint, Medical Board inquiry, HIC inquiry, disciplinary hearing, hospital dispute, pharmaceutical services inquiry, Medicare fraud inquiry, antidiscrimination inquiry, coroners inquiry, criminal charge

* Recoding of data into binary scoring 1,2=disagree and 3,4=agree

** Chi-square procedures were used to compare respondents with a medicolegal matter who agreed with the statement to those without a medicolegal matter who agreed with the statement

\# For all these statements, comparisons were also done between solo and nonsolo GPs. There were no statistically significant differences, however the following approached significance: 72% of solo GPs agreed that the law required them to make perfect medical decisions compared with 62% of nonsolo GPs (χ^2(1,n=548) = 3.63, p=0.057)

Table 3. Practice changes due to medicolegal concerns (n=549)

Practice change	% who changed behaviour more than usual			
	Total cohort (n=549*)	With MLM (n=325)	With no MLM (n=224)	Significance**#
Order tests	73	74	73	ns
Refer to specialists	66	66	66	ns
Avoid a particular type of invasive procedure	49	47	53	ns
Avoid particular obstetric procedure (60% stated not applicable)	49	49	49	ns
Prescribe medication	19	23	15	$\chi^2(1,n=540)=5.62, p=0.018$
Put systems in place to track test results	70	69	71	ns
Provide communication of risk to patients	68	67	70	ns
Put systems in place to audit practice	47	50	43	ns
Put systems in place to identify nonattenders	36	36	36	ns

Note: MLM = medicolegal matter which included the following: civil claim, unlitigated claim, complaint, Medical Board inquiry, HIC inquiry, disciplinary hearing, hospital dispute, pharmaceutical services inquiry, Medicare fraud inquiry, antidiscrimination inquiry, coroners inquiry, criminal charge

* Recoding of data into binary scoring of less than usual, usual = 1, more than usual = 2

** Chi-square procedures were used to compare respondents with a medicolegal matter who agreed with the statement to those without a medicolegal matter who agreed with the statement

\# For all these practice changes, comparisons were also done between solo and nonsolo GPs. There was one significant finding: 61% of solo compared with 72% of nonsolo GPs reported that medicolegal matter concerns had caused them to put systems in place to track test results, more than usual ($\chi^2(1,n=544) = 4.39$, $p=0.036$)

complaints or inquiries) compared to nonrespondents according to UNITED data.[11]

Respondent beliefs about medicolegal issues

Table 2 sets out statements about medicolegal issues and the percentage of respondents who agreed with the statements. *Table 3* reports about changes in practice behaviour due to concerns about medical negligence and complaints, comparing those with and without a history of medicolegal matters, and solo and nonsolo practitioners.

Discussion

This sample of GPs, like other surveyed doctors, had a high level of concern about medicolegal issues, regardless of whether or not they had experienced a medicolegal matter themselves. There was near universal agreement (97%) that doctors make mistakes, yet almost two-thirds (64%) believed that the law required them to make perfect decisions. General practitioners who had experienced a medicolegal matter were significantly more likely to believe that the law required them to make perfect decisions than those who had not. However, the High Court of Australia decision in *Rogers v Whitaker* said: 'The law imposes on a medical practitioner a duty to exercise reasonable care and skill in the provision of professional advice and treatment'.[14] The law therefore does not require perfection, just what is reasonable.

Twenty-one percent of respondents believed that medical mistakes are rare. This is inconsistent with findings that 16.6% of admissions to Australian hospitals were associated with an 'adverse event' resulting in disability or longer stay.[15]

Some respondents believed that an apology to a patient implied an admission of liability (16%), and that patients are more likely to sue a doctor who tells them about a mistake (14%). A 1997 study of legal anxieties associated with mistakes concluded that reluctance to disclose a mistake to a patient may in part be due to the 'culture of infallibility' in which patient care errors may be viewed as character flaws.[16]

Ninety-three percent of respondents agreed that inadequate communication was a factor in most complaints. Interestingly, among those who had experienced a medicolegal matter, agreement with this statement was significantly lower compared with those who had not. Could the importance attributed to communication by 97% of those who had not experienced a medicolegal matter be somewhat protective for them, or do some of those who have experienced a matter feel that communication was not a relevant issue in their particular case?

Nearly half (48%) of the respondents considered retiring early because of medicolegal factors, again higher for those who had experienced a medicolegal matter. This accelerated retirement may contribute to workforce problems at a time when most medical disciplines have national shortages.

This study found a range of practice changes due to concerns about medical negligence and complaints. However, there was little evidence of differences in these changes between GPs who had and had not experienced a medicolegal matter. The costly issue of increased test ordering by 73% of respondents was similar to the USA (79%),[8] the UK (50%),[5] and Chicago (62%).[9] Likewise, increased specialist referrals in 66% of our respondents is similar to the USA

(74%)[8] and the UK (50%).[5] Our sample had a similar rate of avoiding a particular type of invasive procedure (49%) as in Canada (50%).[4] Avoidance of obstetric procedures (in those where this was applicable) occurred in 49% of respondents, which has workforce implications, particularly in rural and remote areas. Unnecessary prescribing is both expensive and potentially dangerous. This occurred in 19% of our respondents, but was statistically higher for respondents who had experienced a medicolegal matter. However, this was less than in the USA, in which 41% prescribed more medication for fear of litigation.[8]

These practice changes, although driven by concerns about medicolegal issues, would provide better outcomes for some patients. For example, ordering of tests may prove to be appropriate medically, or specialist referral may enable better treatment in that particular context. We also found GPs made positive systemic changes due to medicolegal concerns. An increase in the communication of risk to patients in 68% was reported, compared with the Canadian study (80%)[4] and the UK (50%).[5] Systems to track test results, identify nonattenders and practice audit were all increased, and can be seen as positive changes which may improve patient safety.

Limitations of this study

Our respondent sample represents 3% of Australian GPs (2005 workforce data)[13] but was similar to the 2005 workforce data in gender distribution and hours of work. Women made up 35.8% of the respondents (36.5% in the 2005 workforce data). Our respondent sample mean hours of work per week was 40.9 hours (39.9 hours per week of the 2005 workforce data).

The response rate, although similar to other studies, leaves the possibility that those who responded are in some way biased. However, this was addressed by comparing the profile of the nonresponders to the responders and there were no major differences.

Two data sets for medicolegal matters were analysed, and each had their strengths and weaknesses. Self report data was more inclusive than UNITED data, in that respondents would have included matters with other medical insurers (or no medical insurer). However, respondents may have been overinclusive in the self report data, including instances that may not have been considered to be medicolegal matters according to the UNITED criteria.

A longitudinal study is proposed to compare these baseline measures with changes over time for GPs who have a medicolegal matter. This will answer the 'chicken and egg' question of whether medicolegal matters are the cause of some of these attitudes, or are the effect of these issues.

Conclusion

This study found that GPs' concerns about medicolegal matters impact on their practise of medicine. While greater awareness of medicolegal aspects of practice may lead practitioners to exercise greater care and attention in treating their patients, the negative impact of their concerns is that some changes arise from anxiety about medicolegal matters rather than from the exercise of good clinical judgment. The consequence is that health care delivery will incur more unnecessary cost, and the increase in prescription of drugs and procedures may add additional risk to patients (although for some this may improve outcome). Empirical studies such as this highlight the need for targeted training in medicolegal aspects of medical practice so that doctors may better understand how such issues impact on their judgment and decision making.

Conflict of interest: none declared.

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