

# Psychological morbidity in Australian GPs who have experienced a medico-legal matter - a cross sectional survey

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# Frequency of complaints and lawsuits

- ☛ NSW: 5% of doctors each year have a complaint to HCCC
  - ☛ <10%: disciplinary action: counseling, limited conditions, supervision or deregistration
- ☛ 4% of doctors with UNITED - claim against them 2005-06
  - ☛ 2% for GPs
- ☛ litigated claims: 28% are discontinued, 66% settle out of court, 6% progress to trial
- ☛ USA: 77% of O&G have been sued at least once
- ☛ HOWEVER: Many more patients could sue than do

# Study Aims

1. TO investigate the difference in psychological morbidity (psychiatric symptoms, alcohol use, disability) between GPs who have and have not experienced a medico-legal matter.

Consideration given to demographic factors, personality and work pattern variables

2. are there changes in the attitude and practice of medicine due to concerns about medical negligence.

# Definition of medico-legal matters

- Claims for compensation for damages which may or may not go on to a law suit
- Complaints to a health care complaints bodies (HCC)
- Medical board inquiries
- Disciplinary hearings
- Health Insurance Commission inquiries
- Hospital disputes
- Pharmaceutical services inquiries
- Medicare fraud allegations,
- Complaint before the anti-discrimination board
- Coronial inquiry
- Criminal charge

# Method

- 1499 GPs insured with UNITED were invited by UNITED to participate (530 procedural, and random sample 969 non-procedural)
- 261 declined (refusers), leaving 1238 in the project (respondents and non-respondents)
- ☞Two data files:
  - ☞UNITED data: demographic and medico-legal data.
  - ☞Self-report data from questionnaire

# Method continued:

## Questionnaire

- Demographics: age, gender, marital status, country of graduation, type of practice (solo, group, community, hospital), hours worked, weeks worked, peer review and formal education attendance.
- Current and past medico-legal matters
- psychological morbidity:
  - **GHQ 28** (caseness and total score). 4 subscales of somatic symptoms, social dysfunction, anxiety and insomnia, depression
  - **Sheehan disability scale**: work, social, family life
  - **AUDIT**: alcohol use, (caseness and total score)
- Personality measured by Eysenck Personality Questionnaire (EPQ)
- Questions about **attitudes** towards aspects of medical practice, and whether concerns about medical negligence influence practice.

# STATISTICAL METHODS and ETHICS

## SPSS

significance if  $P < 0.05$

2 sample t tests for difference between groups

Proportions measured using the chi squared test.

Pearson Product-Moment or Spearman's rank order correlation coefficient used for bivariate relationships.

Binary logistic regression analyses were performed to determine if medico-legal matters were associated with psychiatric morbidity and potentially hazardous drinking after controlling relevant confounding variables.

**ETHICS:** NSCCAHS, University of Sydney, Board of UNITED

# Results: Demographic and medico-legal characteristics

<b>Table 1: Demographic characteristics of the study participants</b>		
<b>Characteristic</b>	<b>(No.) %</b>	<b>Mean (SD)</b>
Age (n=558)		53.0(9.7)
Gender		
Male	(365/564) 65%	
Marital Status		
Married	(466/562) 83%	
Medical degree obtained		
In Australia	(454/565) 80%	
In UK/Ireland	(40/565) 7%	
In India/SriLanka	(28/565) 5%	
Other	(45/565) 8%	
Hours Worked/Week		40.9 (15.1)
Weeks Worked /Year		46.4 (6.0)
Number of doctors in solo practice	(110/560) 20%	
Proceduralist	(178/565) 32%	
Attendance at peer review (Mean sessions per year)	(239/559) 42%	8.0(9.6)
Attendance at formal education (Mean hours per year)	(531/559) 95%	38.0(32.3)
Medico Legal Assistance Received* (self report data)	(329/559) 59%	
GP's experiencing a major medico-legal matter≠	(250/565) 44%	
<b>GPs experiencing one or more major medico-legal matters (UNITED data)</b>		
Civil Claims	145/565 (25.7)	
Unlitigated Claims	36/565 (6.4)	
Complaints	87/565 (15.4)	
Medical Board Inquiry	32/565 (5.7)	
HIC Inquiry	16/565 (2.8)	
Coroners Inquiry	15/565 (2.7)	
<i>board inquiry, HIC inquiry, disciplinary hearing, hospital dispute, pharmaceutical services inquiry, medicare fraud</i>		
<i>*59% of SURVEY respondents had sought medico-legal assistance which included specific matters defined above , general advice and some matters with other insurance groups.</i>		

# Results: Self-report data medico-legal matters

45.7% response rate to survey

Comparing ever had medico-legal matter to never

- **Older** (54.0 –v- 51.3 yrs  $p < 0.001$ )
  - **Worked more hours** (43.1 –v- 37.6 hrs per week  $p < 0.001$ )
    - Current matter - 46.0 hrs
    - 3 or more matters - 49.5 hrs
  - **Proceduralists** higher rate than non (69.3 –v- 53.9%  $p < 0.001$ )
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- Solo –v- non-solo did not reach significance
  - Attendance at peer review or formal education: no difference

# Self report data: gender differences

☞ Female respondents significantly younger: (49.6 –v- 54.7 yrs  
 $p < 0.001$ )

☞ Females work less hours: (31.2 –v- 46.1 hrs  $p < 0.001$ )

☞ Proportionally less females than males sought medico-legal  
assistance (46.5% -v- 65.7%,  $p < 0.001$ )

☞ Females –v- males working >48hours no difference in number  
of medico-legal matters

# UNITED data: Respondents –v- non respondents

- No significant difference in proportions for the critical medico-legal events of claims, complaints and inquiries including coronials.

# RESULTS: GHQ-28

Total cohort: females higher somatic subscore only

Doctors who ever had medico-legal matters –v- never:

significantly higher GHQ total scores

higher subscales: anxiety, social dysfunction, depression

- Similar patten for current matters –v- never
  - Finalised matters continued to have significantly higher depressive subscores –v- never
  - Prevalence of psychiatric morbidity (case identification):
    - Total cohort 27%
    - 23% never had medico-legal matter
    - 45% current matter ( $p < 0.001$ )
      - » 49% males current matter
      - » 31% females current matter
- females working (>48hrs), no difference to males >48hrs

# GHQ cont

- No difference for those attending peer review and those not attending
- No difference proceduralists –v- non proceduralists

# Results: Disability

- Males had higher disability scores than females ( $p < 0.01$ )
- Medico-legal matters: Ever, current and past matters compared with never had a matter
  - All significantly higher impairment
- No difference for those attending peer review and those not attending
- No difference proceduralists –v- non proceduralists

# RESULTS: AUDIT

- Potentially hazardous drinking (AUDIT > 8):
    - total cohort 11.6%
    - males 16.2%
    - Females 3.2%
  
  - never had medico-legal matters: 7.7%
  - Current matters: 22.9%
  - Past matters only 11.4%
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- **Males** had significantly increased **total AUDIT** scores for those with i)ever, ii)current and iii)past matters compared to never.
  - No such pattern for females
  
  - Females >48hrs –v–Males >48 hrs 19.9% males drinking at potentially risky or hazardous level, and no females were (p<0.001)

# RESULTS: AUDIT

- No difference in AUDIT for peer review attendance
- No difference in AUDIT for proceduralists and non-proceduralists

# “Caseness” for Psychiatric morbidity and hazardous drinking

**Table 2: Caseness for psychiatric morbidity and alcohol usage risk by gender, medico-legal assistance and working hours**

	Total GP cohort (n = 565)	Gender		Medico-legal assistance sought <sup>a</sup>				Working hours <sup>^(hrs/wk)</sup>		
		Female % (n=199)	Male % (n=365)	Never % (n=230)	Ever % (n=329)	Past matter % (n=258)	Current Matter % (n=71)	<36 (n=186)	36-48 (n=179)	>48 (n=178)
Psychiatric Morbidty GHQ>4	27	23	28	21	30*	26	45***	27	22	31
Alcohol Usage Risk AUDIT>=8	12	3	16***	8	14*	11	23***	9	8	18***
#Past matter finalised										
<sup>a</sup> Chi-square *p<=0.05, ***p<=0.001 (compared to never for medico-legal assistance sought)										
<sup>^</sup> Workload Pattern *** p<0.001 (>48hr Gp versus other two Workload Gps, for AUDIT>=8)										

# Personality and psychological morbidity

- High Neuroticism and introversion had significant correlations with high GHQ scores, and high disability scores :
  - Neuroticism and total GHQ ( $r = 0.47, p < 0.001$ ),
  - Introversion and total GHQ ( $r = 0.21, p < 0.001$ ),
  - Neuroticism and Disability ( $r = 0.45, p < 0.001$ )
  - Introversion and Disability ( $r = 0.24, p < 0.001$ ).
- Small but significant correlation between psychoticism and potentially hazardous drinking ( $r = 0.12, p < 0.01$ ) and less so with neuroticism ( $r = 0.10, p < 0.05$ ).

# Personality profile of the cohort

- Males higher psychoticism and lower neuroticism scores than females
- No gender difference in EPQ scores if working >48 hours per week
- Positive correlation between extraversion scores and attending peer review ( $r=0.17$ ,  $p<0.001$ ).
- Proceduralists and non-proceduralists: no difference in EPQ scores
- Solo and non-solo practitioners: no difference in EPQ scores.
- Males who self-reported a medico-legal matter had higher Neuroticism scores on the EPQ than males who did not report medico-legal matters. Not so for females.

# Do current medico-legal matters predict psychiatric morbidity (GHQ) and potentially hazardous drinking (AUDIT)

## Binary Logistic Regressions

Psychiatric morbidity: Co-variates: Age, years of practice, neuroticism, introversion .

Current medico-legal matters significantly predicted psychiatric morbidity, such that those GPs who had a current medico-legal matter were more likely to have psychiatric morbidity than those without a current medico-legal matter.

Potentially hazardous drinking (AUDIT case identification): Co-variates: gender, years of practice, hours worked per week, psychoticism and neuroticism.

Current medico-legal matter significantly predicted potentially hazardous drinking, such that those GPs who had a current medico-legal matter were more likely to have potentially hazardous drinking than those without a current medico-legal matter.

# Results: Attitudes and Practice

- 96% **agreed** - all doctors make mistakes
  - 91% agreed – awareness of risks of medical negligence has increased in recent years
  - 74% agreed - felt comfortable discussing mistakes with colleagues
  - 69% agreed – doctors are encouraged to report medical errors
  - 68% agreed - professional standards should be set solely by medical profession
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- 84% **disagreed** - an apology to a patient implies an admission of liability
  - 87% disagreed - patients likely to sue if a doctor tells about a mistake
  - 98% disagreed – only unprofessional or incompetent doctors get sued

# Results: Attitudes and Practice

- SIGNIFICANT DIFFERENCES BETWEEN THOSE WITH MEDICO-LEGAL MATTER AND THOSE WITHOUT
- 91% agreed – inadequate communication is a factor in most complaints
  - Self reported medico-legal matter: 90%
  - No self reported matter: 97% ( $p < 0.005$ )
- 46% agreed – medico-legal factors made them consider retiring early
  - Self reported medico-legal matter: 52%
  - No self reported matter: 43% ( $p < 0.05$ )
- 64% agreed - “the law requires me to make perfect medical decisions”
  - Self reported medico-legal matter: 68%
  - No self reported matter: 59% ( $p < 0.05$ )

# Results: Attitude and Practice

## DUE TO CONCERNS ABOUT MEDICAL NEGLIGENCE

- 72% ordered more tests than usual
- 65% refer to specialists more than usual
- 43% avoid a particular invasive procedure more than usual
- 19% prescribe medications more than usual
  - Self reported medico-legal matter: 23%
  - No self reported matter: 15% ( $p < 0.05$ )
- **Positive Changes:**
- 69% put systems in place to track results more than usual
- 68% communicate risk more than usual
- 45% put systems in place to audit practice more than usual
- 34% put systems in place to identify non-attendees more than usual

# LIMITATIONS

- GP study – can we generalise
- Response rate similar to other doctor studies
- Responder bias – attempts made to address this
- Larger study required with other specialty groups
- Longitudinal component required: “chicken and egg”

# DISCUSSION:

- Results similar to other studies: Males, proceduralists, more hours more likely to have more medico-legal matters
- Higher psychiatric morbidity and higher rates of potentially hazardous alcohol use (in males) in those who had current medico-legal matters
- It was hypothesized that peer review would be protective of professional problems by identifying doctors who are better engaged with their peers and less prone to adverse outcomes.
  - There was no difference in those respondents who attended Peer review and those who did not on occurrence of medico-legal matters, psychological morbidity or alcohol use.

# Gender issues

- Gender differences: females less hours, fewer matters, less morbidity
- Females and males working >48hrs, no difference on medico-legal matters
- Males with medico-legal matters: alcohol case identification rates higher than females
- Previous Australian medical studies have found female doctors to have higher GHQ case identification than males.
- However, GPs appear to have lower psychiatric morbidity as compared to interns and hospital consultants.
- These other Australian medical practice studies have not examined the effect of work volume on gender differences.

<b>Psychiatric morbidity prevalence (%) (GHQ&gt;4)</b>				
	<b>%</b>	<b>Male %</b>	<b>Female %</b>	<b>Type</b>
Study Respondent	27	28	23	GP
Study Respondent (Current M	45	49	31	GP
Bruce et al (2003)29	41	39	44	Hospital Consultant
Willcock et al (2004) 30	37	33	41	Intern
GHQ>4 = General Health Questionnaire 28, cutoff greater than 4				
% = number per 100 doctors				

# Change in attitude and practice

- As in the literature, concerns about medico-legal issues have both negative and positive influences.  
Ordering more tests and medication is expensive on the community, and has own risks
- Positive changes such as increased communication of risk, systems to track tests and to identify non-attenders and audit practice

# Conclusions

- The high number of GPs experiencing psychological morbidity with a current medico-legal matter shows a need to investigate avenues to assist doctors. This may have benefits for the practitioner, the patient, the health system and the insurer.
- Interventions to consider include education of the workforce regarding the different medico-legal processes, psychological reactions, availability of supports and positive coping strategies, and being mindful of the potential for negative coping strategies such as overuse of alcohol.