



Pushpani Herath

Laura Forrest

Ian McRae

Rhian Parker

# Patient initiated aggression

## Prevalence and impact for general practice staff

### Background

Patient initiated aggression toward general practice staff can cause distress among staff, however, it is unknown how frequently practice staff experience patient aggression in the workplace. The aim of this study is to determine the national prevalence of patient aggression toward general practice staff.

### Method

A clustered cross sectional survey involving general practice staff working in Australia.

### Results

A questionnaire was posted to 1109 general practices nationally and 217 questionnaires were completed and returned (19.6% response rate). It was found that verbal aggression is commonly experienced by practice staff, particularly receptionists, whereas physical aggression is infrequent. Staff working in larger practices experience more verbal aggression and property damage or theft and it was reported that verbal aggression has a greater impact on staff wellbeing than physical aggression.

### Discussion

This study provides some national evidence of the prevalence of patient aggression toward general practice staff. This may inform the development of policy and procedures.

**Keywords:** general practice; violence; professional/patient relations; aggression

The European Commission defines occupational violence as 'any incident where staff are abused, threatened, or assaulted in circumstances relating to their work, involving an explicit or implicit challenge to their safety, wellbeing or health'.<sup>1</sup> Workplace violence falls into three broad categories with the perpetrators being either external to the workplace, clients (or patients) of the workplace, or internal staff members.<sup>2</sup> Healthcare workers are particularly at risk of violence initiated by 'clients' because of their constant exposure to patients and their families.<sup>3,4</sup>

Workplace violence perpetrated by patients toward general practice staff has been increasingly recognised as a public health issue.<sup>5</sup> Most studies have examined general practitioners' experience of patient aggression, and a few have investigated receptionists' experience of patient aggression.<sup>6-13</sup> To date there have not been any studies that investigate patient aggression experienced by practice managers, practice nurses, and allied health professionals working in general practices.<sup>14</sup> This is the first Australian national survey to examine the prevalence of patient aggression perpetrated toward general practice staff. This survey forms part of a larger study and was informed by a literature review,<sup>15</sup> interviews with stakeholders,<sup>16</sup> and qualitative interviews and focus groups with GPs and practice staff.

Findings from the qualitative component suggested that 'aggression' was a more acceptable term to general practice staff than 'violence'. Therefore, the term 'patient aggression' is used in this study instead of patient violence. This study aimed to determine the prevalence

of patient aggression experienced by general practice staff.

### Method

This study was a clustered cross sectional design involving general practice staff working in Australia. The content of the survey was informed by the findings from the literature review,<sup>15</sup> stakeholder interviews,<sup>16</sup> and the qualitative component of this study. The survey was cognitively tested with six purposively sampled general practice staff, then piloted with a division of general practice to ensure the content was relevant and easy to understand.

Nineteen divisions of general practice were purposively selected nationally to represent urban, rural, and remote areas using the Australian Rural, Remote and Metropolitan Areas classification system. The questionnaire, cover letter and reply paid envelope were mailed in February 2010 to 1109 practice managers working in general practices located within the selected divisions. A reminder postcard was sent 2 weeks after the survey was posted. The final response was received April 2010.

The questionnaire consisted of five sections. Section one included practice demographics; section two and three included questions about six types of aggression – verbal aggression, property damage or theft, stalking, physical assault, sexual harassment, and sexual assault.<sup>13</sup> For each type of aggression, practice managers responded for themselves and on behalf of the practice nurses, receptionists and allied health workers about the prevalence. Section four and five enquired whether the risk of patient aggression increased at particular times of the day or week, and about the impact of patient aggression on staff health and wellbeing and the healthcare service.

Practice managers were asked to complete the survey on behalf of practice staff, however, if a practice manager was not available another practice representative was asked to complete the survey.

A t-test was performed to compare the prevalence of different forms of aggression between healthcare professionals. Using multivariate logistic regression, the study analysed the factors associated with the prevalence of patient aggression toward general practice staff.

Ethics approval was granted from the Australian National University Human Research Ethics Committee.

## Results

Two hundred and seventeen completed questionnaires were received (response rate = 19.56%). The demographics of the study sample are shown in Table 1. The practice managers were asked about the prevalence of patient initiated aggression toward practice staff during the past 12 months.

The majority of practice managers responded that they did not know the prevalence of the different types of aggression perpetrated toward allied health professionals. Therefore, there were too few reports of allied health professionals' experiences of patient aggression to include in the regression analysis.

## Verbal aggression

Verbal aggression was the most common type of patient aggression experienced by all practice staff, with receptionists experiencing the most (Figure 1). Receptionists' experience of verbal aggression was significantly higher than that of practice managers ( $p < 0.001$ ) and practice nurses ( $p < 0.001$ ). Practice managers experienced significantly more verbal aggression than practice nurses ( $p = 0.006$ ).

Practice managers reported that staff experienced verbal aggression:

- weekly or more often – receptionists: 21%; practice managers: 9%; practice nurses: 4%; allied health professionals: 1%
- fortnightly to monthly – receptionists: 21%; practice managers: 12%; practice nurses: 12%; allied health professionals: 2%
- in the past 6–12 months – receptionists: 33%; practice managers: 27%; practice nurses: 20%; allied health professionals: 4%.

Table 1. General practice demographics

Staff position	Average number of staff (full time or part time) per practice (range and SD)	Total number
General practitioners	3.9 (1–45, SD: 4.5)	846
Practice nurses	1.7 (0–18, SD: 2.1)	369
Allied health professionals	0.9 (0–14, SD: 1.7)	195
Practice managers	0.8 (0–6, SD: 0.6)	174
Receptionists	3.3 (0–16, SD: 2.6)	716
State	n (%)	
Australian Capital Territory	23 (10.5)	
New South Wales	46 (21)	
Northern Territory	5 (02)	
Queensland	28 (13)	
South Australia	34 (16)	
Tasmania	33 (15)	
Victoria	34 (16)	
Western Australia	13 (06)	
Not reported	1 (0.5)	
Practice location	n (%)	
Metropolitan	108 (51)	
Nonmetropolitan	107 (49)	
Not reported	2 (01)	
Practice composition	n (%)	
Sole general practitioner	66 (30)	
Group practice	87 (40)	
Corporate practice	32 (15)	
Other practice	30 (14)	
Not reported	2 (01)	
Services provided	n (%)	
Home visits during hours	148 (68)	
Home visits after hours	144 (66)	
After hours consultations on weekdays	72 (33)	
After hours consultations on weekends	75 (35)	
None of the above	26 (12)	

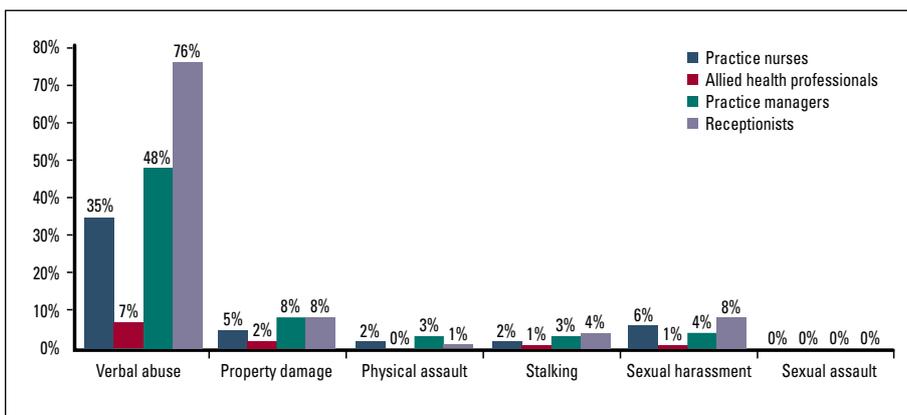


Figure 1. Prevalence of different types of aggression experienced by practice staff during the previous 12 months

## Physical aggression

Very few practice staff had experienced property damage or theft, physical assault or stalking in the past 12 months. The majority of practice staff had never experienced physical assault or stalking.

## Sexual aggression

While very few practice staff had experienced sexual harassment in the past 12 months, receptionists experienced significantly more sexual harassment than practice managers ( $p=0.04$ ). There were no sexual assaults reported during the past 12 months for any practice staff.

## Factors for prevalence of patient aggression

The variables associated with patient initiated aggression are explored in the logistic regressions reported in *Table 2*. Stalking, physical assault and sexual assault were excluded from this analysis, as were allied health professionals, because there were too few reports of these types of aggression. States and territories and more detailed regional levels (separating rural and remote) were tested but showed no significant results and are not reported.

Practice size significantly predicted the prevalence of verbal aggression against receptionists and practice nurses. Staff working in practices with more than one GP were exposed to significantly more verbal aggression over the past 12 months than staff working in practices with one GP. In addition, practice managers and practice nurses working in practices with greater numbers of staff experienced significantly more verbal aggression and property damage or theft.

Practice nurses working in nonmetropolitan practices experienced significantly more sexual harassment than their counterparts working in metropolitan practices. Reception staff, practice managers, and practice nurses working in nonmetropolitan practices experienced more verbal aggression than those working in metropolitan practices (*Table 3*), although this difference was not always significant, it is of interest to note.

Practice nurses working in practices that

Characteristics of practice and staff	Verbal abuse		Property damage or theft		Sexual harassment	
	$\beta$	p value	$\beta$	p value	$\beta$	p value
<b>Receptionists</b>						
Practice size*	-1.19	0.003	-0.44	0.5	-0.61	0.4
Number of receptionists	0.21	0.06	-0.03	0.8	0.07	0.5
Practice location**	0.19	0.3	0.23	0.6	-0.44	0.4
After hours consult – week	-0.25	0.6	0.07	0.9	-0.59	0.4
After hours consult – weekend	0.47	0.4	0.39	0.6	-0.10	0.9
Nagelkerke R**	0.185		0.016		0.057	
<b>Practice managers</b>						
Practice size*	-0.65	0.09	0.50	0.4	-0.88	0.4
Number of practice managers	2.30	0	1.10	0.03	0.42	0.3
Practice location**	-0.56	0.08	0.60	0.3	0.19	0.8
After hours consult – week	-0.62	0.2	-1.30	0.07	0.54	0.6
After hours consult – weekend	0.31	0.5	0.95	0.2	-0.83	0.4
Nagelkerke R**	0.329		0.119		0.052	
<b>Practice nurses</b>						
Practice size*	-1.03	0.02	-0.94	0.7	-0.95	0.3
Number of practice nurses	0.51	0	0.25	0.03	0.03	0.8
Practice location**	-0.44	0.2	-0.53	0.5	-1.79	0.03
After hours consult – week	11.38	0.005	-1.13	0.3	-1.21	0.2
After hours consult – weekend	0.85	0.09	1.20	0.3	-0.54	0.5
Nagelkerke R**	0.346		0.159		0.197	

\* Solo GP practices compared with practices with more than one GP  
 \*\* Metropolitan compared to nonmetropolitan general practices  
 Note: Sample size is 217

Location	Practice managers	Practice nurses	Allied health professionals	Receptionists
Metropolitan	38.0	25.9	8.3	73.1
Nonmetropolitan	57.9	44.9	5.6	76.6

Note: All numbers are given in percentages

provide after hours consultations during the week experienced significantly more verbal aggression than those not working after hours.

## Impact of patient initiated aggression

The majority of practice managers recognised that verbal aggression causes staff distress (57%), can lead to the need for procedural changes (37%) and for staff to have counselling

(11%). Fewer practice managers reported that physical aggression causes staff distress (14%), the need for procedural changes (11%) or for staff to have counselling (3%). When compared to all practice manager respondents, those practice managers who had experienced physical aggression reported increased percentages of staff distress (39%), and need for procedural change (29%) and staff counselling (10%).

## Discussion

These findings suggest that verbal aggression is the most commonly experienced type of patient aggression. Over 40% of receptionists were reported as experiencing verbal aggression monthly or more often and much more frequently than their colleagues. Receptionists have been described as the 'gatekeepers' of general practices and are the first point of contact for patients by telephone or in person.<sup>8</sup> This position may increase their vulnerability to experiencing verbal aggression more than other general practice staff. In line with these findings a United Kingdom study found two-thirds of the receptionists surveyed had experienced verbal abuse in the 12 months before the study.<sup>8</sup>

The practice size, measured by number of GPs and number of practice staff, influenced the prevalence of patient aggression perpetrated toward practice staff. Larger practices are likely to have greater patient numbers attending, which increases the degree of patient interaction and therefore the opportunity for the occurrence of patient aggression. It is unknown whether these larger practices are more successful in managing patient aggression due to more constant exposure.

In comparison to physical aggression, verbal aggression was reported to have a greater impact on the health and wellbeing of practice staff. As staff experience far more verbal aggression and on a more regular basis compared to physical aggression, it is unsurprising that this type of aggression has greater perceived impact. Bayman and Hussain<sup>6</sup> found that receptionists who had experienced patient threats or attacks were more likely to feel unsafe at work. They also found that reception staff felt safer in their workplace when they had received training to deal with aggressive patients.

## Study limitations

The major limitation of this study is the risk of response bias due to the 20% response rate. Furthermore, the survey was completed by practice managers on behalf of the practice staff, and it is not clear whether they have an accurate perception of the prevalence of patient aggression experienced by other general practice staff. It is not clear whether practices that saw patient

aggression as an issue for their practice because they had experienced it were more likely to have responded than those with no experience of patient aggression. If this was the case it would have led to an overestimation of the prevalence of patient aggression in the survey results.

## Conclusion

This survey is the first to attempt to determine the prevalence of patient initiated aggression toward general practice staff and the impact of such aggression on practice staff nationally.

Maintaining the health and wellbeing of practice staff is integral to occupational health and safety policies. Therefore, this evidence, while very limited, may help to inform the development of policy and procedures to reduce the prevalence of patient aggression, particularly verbal aggression. This is not to say that physical or sexual patient initiated aggression is any less important, and while experienced infrequently, the risks of these types of aggression need to be minimised.

## Authors

Pushpani Herath MBBS, MSc, is Research Assistant, Australian Primary Health Care Research Institute, Australian National University, Canberra, Australian Capital Territory. pushpani.herath@anu.edu.au

Laura Forrest PhD, is a Postdoctoral Fellow, Australian Primary Health Care Research Institute, Australian National University, Canberra, Australian Capital Territory

Ian McRae BSc(Hons), BA, MSc, PhD, is Senior Research Fellow, Australian Primary Health Care Research Institute, Australian National University, Canberra, Australian Capital Territory

Rhian Parker BSc(Hons), MSc, MPET, PhD, is Associate Professor, Australian Primary Health Care Research Institute, Australian National University, Canberra, Australian Capital Territory.

Conflict of interest: none declared.

## Acknowledgment

This study was funded by the Australian Government Department of Health and Ageing.

## References

1. Wynne R, Clarkin N, Cox T, et al. Guidance on the prevention of violence at work. Brussels: European Commission, 1996. Report No. CE/VI-4/9.
2. Mayhew C, Chappell D. The occupational violence experiences of 400 Australian health workers: an

exploratory study. *J Occ Health Safety* 2003;19:3–43.

3. International Labour Office, International Council of Nurses, World Health Organization, Public Services International. Framework guidelines for addressing workplace violence in the health sector. Geneva: ILO, ICN, WHO, PSI Joint Programme on Workplace Violence in the Health Sector, 2002.
4. Alexander C, Fraser J. Occupational violence in an Australian healthcare setting: implications for managers. *J Healthc Manag* 2004;49:377–90.
5. Rowe L, Kidd MR. Increasing violence in Australian general practice is a public health issue. *Med J Aust* 2007;187:118–9.
6. Bayman PA, Hussain T. Receptionists' perceptions of violence in general practice. *Occup Med* 2007;57:492–8.
7. Chambers F, Kelly M. Violence at work: the experience of general practice receptionists. *Ir Med J* 2006;99:169–71.
8. Dixon CAJ, Tompkins CNE, Allgar VL, et al. Abusive behaviour experienced by primary care receptionists: a cross-sectional survey. *Fam Pract* 2004;21:137–9.
9. Magin PJ, Joyce T, Adams J, et al. Receptionists' experiences of occupational violence in general practice: a qualitative study. *Br J Gen Pract* 2009;59:578–83.
10. Koritsas S, Coles J, Boyle M, et al. Prevalence and predictors of occupational violence and aggression towards GPs: a cross-sectional study. *Br J Gen Pract* 2007;57:967–70.
11. Magin PJ, Adams J, Sibbritt DW, et al. Experiences of occupational violence in Australian urban general practice: a cross-sectional study of GPs. *Med J Aust* 2005;183:352–6.
12. Ness GJ, House A, Ness AR. Aggression and violent behaviour in general practice: population based survey in the north of England. *BMJ* 2000;320:1447–8.
13. Tolhurst H, Baker L, Murray G, et al. Rural general practitioner experience of work-related violence in Australia. *Aust J Rural Health* 2003;11:231–6.
14. Wright NM, Dixon CA, Tompkins CN. Managing violence in primary care: an evidence-based approach. *Br J Gen Pract* 2003;53:557–62.
15. Forrest LE, Parker R, Hegarty K, et al. Patient initiated aggression and violence in Australian general practice. *Aust Fam Physician* 2010;39:323–6.
16. Ceramidas DM, Parker RM. A response to patient-initiated aggression in general practice: Australian professional medical organisations face a challenge. *Aust J Prim Health* 2010;16:252–9.

correspondence [afp@racgp.org.au](mailto:afp@racgp.org.au)