Horizontal violence: experiences of Registered Nurses in their first year of practice

Brian G. McKenna BA MHSc RCpN

Senior Lecturer, School of Nursing, University of Auckland; and Nurse Advisor, Auckland Regional Forensic Psychiatry Services, Waitemata District Health Board, Auckland, New Zealand

Naumai A. Smith BA MHSc RGON

Senior Lecturer, School of Nursing and Midwifery, Auckland University of Technology, Auckland, New Zealand

Suzette J. Poole RPN Cert Psychiatric Forensic Care

Clinical Nurse Leader-Educator, Regional Forensic Mental Health Services, Waikato District Health Board, Hamilton, New Zealand

and John H. Coverdale MB ChB FRANZCP

Associate Professor, Division of Psychiatry, University of Auckland, Auckland, New Zealand

Correspondence:
Brian McKenna,
School of Nursing,
University of Auckland,
Private Bag 92019,
Auckland 1020,
New Zealand.
E-mail: b.mckenna@auckland.ac.nz

McKENNA B.G., SMITH N.A., POOLE S.J. & COVERDALE J.H. (2003) *Journal of Advanced Nursing* **42**(1), 90–96

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Background. Interpersonal conflict among nurses (traditionally called 'horizontal violence' or 'bullying') is a significant issue confronting the nursing profession. However, there is a dearth of research focusing on horizontal violence experienced by new graduate nurses.

Aims. In order to assess the priority for preventive intervention programmes, the aims of this study were to determine the prevalence of horizontal violence experienced by nurses in their first year of practice; to describe the characteristics of the most distressing incidents experienced; to determine the consequences, and measure the psychological impact, of such events; and to determine the adequacy of training received to manage horizontal violence.

Method. An anonymous survey was mailed to nurses in New Zealand who had registered in the year prior to November 2000 ($n = 1169$) and 551 completed questionnaires were returned (response rate 47%). Information was requested on the type and frequency of interpersonal conflict; a description of the most distressing event experienced; the consequences of the behaviour; and training to manage such events. The Impact of Event Scale was used to measure the level of distress experienced.

Results. Many new graduates experienced horizontal violence across all clinical settings. Absenteeism from work, the high number of respondents who considered leaving nursing, and scores on the Impact of Event Scale all indicated the serious impact of interpersonal conflict. Nearly half of the events described were not reported, only 12% of those who described a distressing incident received formal debriefing, and the majority of respondents had no training to manage the behaviour.

Conclusions. First year of practice is an important confidence-building phase for nurses and yet many new graduates are exposed to horizontal violence, which may negatively impact on this process. The findings underscore a priority for the development of effective prevention programmes. Adequate reporting mechanisms and supportive services should also be readily available for those exposed to the behaviour.

Keywords: interpersonal conflict, horizontal violence, bullying, violence, sexual harassment, psychological distress, nursing

Introduction

Given the central focus of caring in the nursing profession, it is paradoxical that the literature reveals interpersonal conflict among nurses (traditionally called 'horizontal violence' or 'bullying') as a significant issue confronting the nursing profession (Cox 1987, Duffy 1995, Farrell 1997, 2001, Taylor 2001). Horizontal violence most commonly takes the form of psychological harassment, which creates hostility, as opposed to physical aggression. This harassment involves verbal abuse, threats, intimidation, humiliation, excessive criticism, innuendo, exclusion, denial of access to opportunity, disinterest, discouragement and the withholding of information (McMillan 1995, Farrell 1997, 1999, Thomas & Droppleman 1997, Quine 1999).

Evidence suggests that exposure to these behaviours can be psychologically distressing (McMillan 1995, Brooks *et al.* 1996, McCall 1996, Wheeler 1998). Indeed, some nurses

have wanted to leave the profession as a consequence (Turnbull 1995, Wheeler 1998, Quine 1999). Despite these effects, nurses tend to under-report such incidents, possibly because of a fear of retaliation (Farrell 1997).

There are few studies which consider interpersonal conflict experienced by new graduate nurses (Kelly 1996, De Bellis *et al.* 2001, Hinds & Harley 2001, Thomka 2001). Furthermore, the findings of these studies are limited by a lack of information on the prevalence of interpersonal conflict, small sample sizes, and lack of clarification of the representativeness of the samples of nurses researched. We therefore decided to carry out a study focusing on nurses in the first year after registration, because they may be vulnerable to interpersonal conflict given their junior status and the high levels of stress associated with role adjustment.

The study

Aims

In order to assess the priority for preventive intervention programmes for new graduate nurses, the aims of the study were to (1) determine the prevalence of various types of interpersonal conflict experienced by nurses nationally in their first year of practice; (2) describe the characteristics of the most distressing incidents nurses experience; (3) measure the psychological impact of these events; (4) determine the consequences of experiencing such events; and (5) determine the adequacy of training received to manage horizontal violence.

Design

This descriptive study was one part of a national survey in New Zealand which explored the nature and impact of interpersonal conflict by both patients and nursing colleagues against Registered Nurses in their first year of practice. Only interpersonal conflict among nursing colleagues is considered in this article.

What is already known about this topic?

- Horizontal violence is a significant issue confronting members of the nursing profession.
- The experience of such behaviour can be psychologically distressing.

What this paper adds?

- It confirms that horizontal violence is a common experience for nurses in their first year of practice.
- It demonstrates that this experience has a significant psychological impact on new graduate nurses.
- It indicates that new graduate nurses are under-prepared for such events and that the events themselves are under-reported
- It recommends that primary prevention programmes, and adequate reporting mechanisms and supportive services, need to be developed.

Sample

A target population of first year graduates was identified by the Nursing Council of New Zealand from their national register of all practising nurses. The Council was contracted to mail out an information letter and anonymous questionnaire to all nurses residing in New Zealand who had registered following the State Registration Examinations in November 1999, March 2000 and July 2000. First year nurses residing overseas were excluded from the study as their forwarding addresses were often not known. The initial questionnaire and two reminder letters were sent between October 2000 and January 2001.

Methods

Questionnaire

The study instrument was modified from a questionnaire on interpersonal conflict by patients directed toward trainee physicians in New Zealand (Coverdale *et al.* 2001) by applying the items of this questionnaire to interpersonal conflict by 'nurses' towards Registered Nurses in their first year of practice. The term 'nurses' referred to Enrolled Nurses, Registered Nurses, clinical nurse leaders or clinical nurse educators involved in incidents either inside or outside the practice setting in the time since the respondent had registered. Modification of the questionnaire format to apply to interpersonal conflict between nurses was guided by descriptions in the literature as to what constitutes horizontal violence, and by the expert opinion of the researchers. The questionnaire was piloted with a convenience sample of 10 second year Registered Nurses. As a result, minor changes were made to its wording and format.

A broad interpretation of horizontal violence was taken in the survey to include a range of covert and overt interpersonal conflict including sexual harassment. In considering covert behaviour, respondents were asked whether other nurses had: denied them access to learning opportunities; undervalued them (for example treated them like a student); made them feel that there would be repercussions if they spoke out about interpersonal conflict; emotionally neglected them; left them feeling distressed by exposure to conflicts between others; failed to support them in their defence; given them too much responsibility without appropriate supervision; or spread rumours and lies about them. With regard to actual behaviour, respondents were asked whether they had been subject to threats by other nurses (verbally or by letter) and whether their family members had been threatened. They were also asked if other nurses had attempted to humiliate them through using direct verbal statements (for example, rudeness, abusive language, humiliation or unjust criticism), or if other nurses had attempted to harass them by use of formal complaint processes, racist comments or stalking. The questionnaire also asked if other nurses had attempted to intimidate them physically (for example, by banging a fist, or throwing an object); damaged property in their presence; attempted to physically assault them; sexually harassed them either verbally or by making physical contact (for example, brushing against, touching or grabbing); or made actual physical contact with them that did or did not require medical attention. When a nurse answered affirmatively to any of these questions, they were asked how many times the specific behaviour had occurred.

Respondents were then asked to rate the level of distress (none, minimal, moderate or severe) caused by the one incident that had caused the most distress and to describe this incident in detail. This incident could be interpersonal conflict with a patient or a nursing colleague (only the latter are considered in this article). Information was also requested on the specific location of this incident; age and gender of the perpetrator; to whom the incident was reported, if at all; and whether any formal support in the form of counselling or debriefing had been received. Questions were also asked to determine if the incident had resulted in absenteeism or a desire to leave the nursing workforce.

Nurses were also asked whether they had ever had any teaching or training in coping with adverse staff relationships (for example, assertiveness training), as well as the number of hours of education or training received and whether training was viewed as adequate or inadequate.

Impact of Event Scale

The Impact of Event Scale was used to measure the level of distress experienced over the 7 days proceeding completion of the questionnaire because it is a validated and reliable measure of subjective psychological distress (Horowitz *et al.* 1979, Shalev *et al.* 1997, Sundin & Horowitz 2002).

Ethical considerations

Ethical permission for the study was obtained from the Auckland University of Technology Ethics Committee. Those contacted were informed that they were free to refuse to participate without any consequences for them and that consent was assumed by their return of the completed questionnaire. Confidentiality was assured by no personal or identifying information being included in the questionnaire.

The potential risk of psychological distress from the respondent recalling the incident was acknowledged. The nurse investigators had experience in debriefing and knowledge of referral services for those experiencing on-going psychological distress. Their contact telephone numbers were included in the covering letter, with an invitation to telephone them and discuss any psychological distress caused by completing the questionnaire.

Data analysis

Statistics were analysed using the statistical programme SPSS (SPSS Inc., Chicago 2002). Open-ended questions were asked in the survey to allow respondents to describe the most distressing incident, describe the consequences of the incident, and outline any steps taken to leave nursing as a result. These data were analysed for the presence of categories not considered in specific questions in the survey. Categories were only included if there was mutual interobserver agreement by two of the investigators. The frequency of the occurrence of each category was quantified. (Robson 1993).

Results

Sample description and representativeness

Of the 1169 questionnaires mailed, 584 were returned. Of the returns, 33 were blank, indicating that these people had made an informed choice not to participate. The 551 completed questionnaires constituted a response rate of 47% of the total eligible participants. This was a favourable response given the low response rate of 30% associated with anonymous mailed surveys (Gillham 2000).

Of those who indicated the clinical area they were working in, 114 (21%) were practising in medical wards, 145 (26%) in surgical wards, 164 (30%) in other inpatient services (including assessment and rehabilitation, care of older people, obstetrics, paediatrics, accident and emergency, operating theatre and intensive care units), 68 (13%) in mental health services, 30 (6%) in community services (including district nursing, public health nursing, practice nursing, palliative care, family planning and occupational health), and 22 (4%) in other areas not easily categorized (including nurse education and administration). Three hundred and eight-five (70%) graduated following the State Registration Examination in November 1999, 16 (3%) in March 2000 and 146 (27%) in July 2000.

With regard to the demographic profile of respondents, of the 545 who indicated their gender 513 (94%) were female and 32 (6%) were male. Of the 547 who indicated their age, 251 (46%) were aged less than 30, 138 (25%) were between 30 and 39 years, 130 (24%) were between 40 and 49, and 28 (5%) were aged 50 or over. Of those who responded about ethnicity ($n = 544$), most identified themselves as European 458 (84%), 51 (9%) as Maori (the indigenous people of New Zealand), 8 (1·5%) as belonging to Pacific Island cultures, 19 (3·5%) as Asian, and 8 (1·5%) as 'other'.

It was possible to determine the representativeness of the sample in relation to ethnicity, gender, current work place setting and geographical location of employment by comparison with Nursing Council data. Chi-square analysis showed no significant differences in these variables except for ethnicity ($\chi^2 = 9·2$, d.f. $= 4$, $P = 0·03$). There was an under-representation of participants from Pacific Island cultures (1·5% in the sample as opposed to 2·1% in the target population) and Asian cultures (3·5% in the sample as opposed to 5·7% in the target population).

Types of threats and assault

As can be seen from Table 1, covert interpersonal conflict was common. Over half of the participants reported being undervalued by other nurses (e.g. being treated like a student). Over a third had had learning opportunities blocked, felt neglected, been distressed by the conflict between others, or thought they were given too much responsibility without appropriate support. A minority had experienced these behaviours more than twice: being undervalued (31%), blocking of learning opportunities (17%), emotional neglect (16%), feeling distressed by the conflict of others (16%), and being given too much responsibility without appropriate support (23%).

With overt interpersonal conflict, the level of conflict was sustained with regard to direct verbal statements, with 34% of respondents ($n = 188$) experiencing statements that were rude, abusive, humiliating or involved unjust criticism. Verbal sexual harassment was experienced by 5% ($n = 25$) of the sample, inappropriate racial comments and gestures by 4% ($n = 21$), harassment through formal complaint processes by 3% ($n = 17$), and verbal threats were by 3% ($n = 18$). Other forms of violence involving physical intimidation, observed property damage, attempted physical assault, sexual harassment involving physical contact, physical assault requiring no medical intervention and stalking were each experienced by 1–2% of the sample. Behaviours were spread across service areas.

Chi-square analysis of all this interpersonal conflict experienced by over a third of the sample was undertaken in relation to major service areas, but there was no significant difference between service areas. Chi-square analysis was also

Table 1 Number and percentage of new graduate nurses in various service areas who had experienced covert interpersonal conflict by other nurses

	Mental health (n = 68)		Medicine (n = 114)		Surgical (n = 145)		Other inpatient (n = 164)		Community (n = 30)		Other (n = 22)		Total* (n = 551)	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Learning blocked	22	32	42	37	50	34	48	29	11	37	12	55	190	34
Undervalued	37	54	76	67	83	57	92	56	13	43	14	64	320	58
Threat of repercussions for speaking out	18	26	25	22	26	18	32	20	5	17	3	14	110	20
Emotional neglect	22	32	42	37	49	34	52	32	6	20	9	41	185	34
Distress about conflict	27	40	47	41	49	34	64	39	7	23	11	50	209	38
Lack of supervision	29	43	51	45	78	54	68	41	11	37	13	59	254	46
Lack of support	16	24	16	14	18	12	31	19	3	10	5	23	91	17
Rumours/lies spread	11	16	15	13	13	9	15	9	3	10	2	9	59	11

*Includes missing values.

undertaken for the same interpersonal conflict in relation to demographic variables. No significant difference was found in relation to gender, ethnicity or geographical area of current work. Respondents under the age of 30 ($n = 170$ of 251; 69%) were more likely than those aged 30 and over ($n = 150$ of 294; 51%) to experience being undervalued ($\chi^2 = 17 \cdot 1$, d.f. = 1, $P = < 0.001$). Those under 30 ($n = 132$ of 251; 53%) were also more likely than those aged 30 and over ($n = 122$ of 294; 42%) to feel that they were given too much responsibility without appropriate support ($\chi^2 = 6 \cdot 3$, d.f. = 1, $P = 0.01$). Finally, those under 30 ($n = 85$ of 251; 29%) were less likely than those aged 30 and over ($n = 103$ of 294; 41%) to experience being verbally humiliated ($\chi = 10 \cdot 3$, d.f. = 1, $P = 0.006$).

Most distressing incidents

A most distressing intracollegial incident was described by 170 (31%) of respondents. The most common descriptions involved rude, abusive or humiliating comments ($n = 70$ of 170; 41%) and being given too much responsibility without appropriate supervision ($n = 40$ of 170; 24%). The level of distress caused by the incident was rated by 112 (66%) as moderate or severe.

In the questionnaire, no reference was made to the professional position of the person involved in the interpersonal conflict. However, in the content analysis of descriptions of most distressing events, the position of the person involved was frequently mentioned. In most cases, the incident involved a person the participant was accountable to in their work ($n = 45$). The positions mentioned included charge nurse, nurse co-ordinator, supervisor, unit manager, duty leader, acting charge nurse, clinical co-ordinator and 'senior nurse'. In some cases it was the participant's preceptor (the person responsible for assisting the transition of the Registered Nurse to the clinical role) ($n = 7$) who was responsible for the behaviour. Conversely, in other cases, the person involved in the interpersonal conflict was an Enrolled Nurse (legally accountable to registered nursing staff) ($n = 8$). In a small number of cases, the incident was associated with the respondent being casual staff in the service ($n = 3$).

Frequently, the location of the most distressing incident was an inpatient ward ($n = 119$; 70%), the gender of the perpetrator female ($n = 141$; 83%), and the age predominantly 30–49 ($n = 101$; 59%). The incident was reported by 84 of the 170 respondents (49%), mostly to a senior nurse (on 27 occasions) or unit manager (on 27 occasions). Twenty respondents (12%) received formal counselling or debriefing as a consequence of the incident.

Consequences of the event

Content analysis of the open-ended question about adverse consequences of the incident highlighted the impact of the event on respondents' confidence. Several directly mentioned that the event had reduced their 'confidence' or 'self-esteem' ($n = 41$). Psychological consequences of the event were also frequently mentioned ($n = 33$), including experiencing fear, anxiety, sadness, 'depression', frustration, mistrust and nervousness. A further respondent mentioned requiring anti-depressant medication as a direct result of the incident. A small number discussed physical consequences of the event ($n = 12$) such as weight loss, fatigue, headaches, and in one case hypertension and another angina. Some felt that the event had compromised patient safety ($n = 4$), while others felt disillusioned with the nursing profession ($n = 4$). Five respondents offered positive outcomes, one stating that it enabled them to 'stand up for myself' and another to 'feel stronger in myself'. Two discussed feeling reassured by the support of other nursing staff, and one mentioned positive outcomes that were not specified in the explanation.

The overall mean score on the Impact of Event Scale for the 170 respondents who described the most distressing incident was 12·1 (range 0–41; SD = 11·2). There was a negative, although weak, correlation between score on the Scale and the number of weeks past since the incident occurred ($r_s = -0.19$, $P = 0.03$). Twelve incidents scored 30 or above on the Scale. Such scores reflect the mean scores in other studies involving participants with symptoms of post-traumatic stress disorder (Horowitz *et al.* 1979, Shalev *et al.* 1997). Of these incidents, five involved inappropriate behaviour which was multiple or prolonged. The other incidents were very specific: sexual harassment with the promise of employment for compliance, encouragement to apply for promotion followed by rejection of the application, a 'tutor' who verbally humiliated the nurse on the ward once she had registered, a clinical co-ordinator who failed to support the nurse when a consultant complained about their practice, colleagues 'setting up' a nurse to be exposed to sexually inappropriate behaviour from patients, lack of collegial support that compromised patient safety, and an inappropriate response to sick leave required by a nurse.

A minority of those who described a most distressing event required days off work as a result (24 of 170; 14%). However, one in three respondents (58 of 170; 34%) indicated that they had considered leaving nursing as a consequence of the incident. Responses to the open-ended question about what steps had been taken about this included a statement that the incident had been resolved through the intervention of other staff ($n = 7$), that the respondent had

moved to another area of practice ($n = 17$), that the respondent was intending to leave nursing ($n = 14$), and that they had reluctantly stayed in the clinical area with the issue unresolved ($n = 11$).

Training

Over a third of those who described a most distressing event indicated that they had had some undergraduate training in coping with adverse staff relations ($n = 66$ of 161; 41%). This training averaged 8 hours in duration (SD = 12·6), and was viewed as adequate by the majority of those who had such training ($n = 34$ of 60; 58%). A small number (21 of 158; 13%) indicated that they had training since registration. This averaged 9 hours in duration (SD = 12), and was viewed by most of those who received it as being adequate (9 of 17; 53%).

Discussion

The study sample was representative of the total population of graduate nurses in their first year of practice on all variables considered except ethnicity. Despite this representativeness, the data should be viewed in the light of several study limitations. As with other studies, the data are limited by the use of self-report and absence of collaborating information. Furthermore, little is known about the circumstances, if any, that initiated some of the horizontal violence against new graduate nurses. Although approximately one in three respondents discussed a most distressing event, there was no inquiry as to why some incidents were not reported.

It was found that many new graduates were likely to have experienced horizontal violence, as defined in the study. The behaviour was prevalent across all clinical settings. Most of the behaviour experienced was subtle and covert in nature, although direct verbal statements which were rude, abusive, humiliating or involved unjust criticism were also common. Horizontal violence has been formally defined as interpersonal conflict between nurses. However, first year graduates may have perceived some occasions of constructive criticism as conflictual. Nevertheless, absenteeism from work, the high number of respondents who considered leaving nursing, and scores on the Impact of Event Scale that were synonymous with symptoms of post-traumatic stress disorder are all indicative of the serious impact of the forms of horizontal violence reported here.

People must feel safe to report the occurrence of horizontal violence. Yet in this study, nearly a half of the distressing events described were not reported. This under-reporting may be because of a fear of retaliation, cynicism

concerning the outcome of processes in which the senior person to be reported to may be the very person responsible for the behaviour, or it may reflect a general trend of under-reporting of incidents by nurses. Effective incident reporting processes and analysis of the reports may increase awareness of how to avoid further incidents of horizontal violence.

Employers should also ensure that supportive services are made readily available for all new graduates who experience horizontal violence, in order to prevent possible psychological sequelae. However, in this study only 12% of those who described a distressing incident received formal counselling or debriefing afterwards. This may be caused by a lack of appropriate services or because the person(s) to whom the new graduate reported was unable to refer them for help.

Emphasis also should be placed on preventing horizontal violence. Primary prevention begins with education and training of staff; however, the majority of the respondents had no undergraduate and postregistration training to enable them to cope with adverse staff relationships. These concerns need to be considered in all areas of nursing including the clinical workplace, curriculum development of undergraduate programmes and development of first year of practice orientation schemes supporting new graduates.

The first year of practice is an important confidence-building phase for nurses; however, this study indicates that graduate nurses in their first year of practice are subjected to a variety of confidence-diminishing behaviours. These findings underline the importance of developing programmes which effectively reduce horizontal violence and lessen the psychological sequelae of such incidents.

Acknowledgements

References

Brooks A., Thomas S. & Doppleman P. (1996) From frustration to red fury: a description of work related anger by male registered nurses. *Nursing Forum* **31**, 4–15.

Coverdale J., Gale C., Weeks S. & Turbott S. (2001) A survey of threats and violent acts by patients against training physicians. *Medical Education* **35**, 153–159.

Cox H. (1987) Verbal abuse in nursing: report of a study. *Nursing Management* **18**, 47–80.

De Bellis A., Longson D., Glover P. & Hutton A. (2001) The enculturation of our nursing graduates. *Contemporary Nurse* **11**, 84–94.

Duffy E. (1995) Horizontal violence: a conundrum for nursing. *Collegian* **2**, 5–17.

Farrell G. (1997) Aggression in clinical settings: nurses' views. *Journal of Advanced Nursing* **25**, 501–508.

Farrell G. (1999) Aggression in clinical settings: nurses, views – a follow-up study. *Journal of Advanced Nursing* **29**, 532–541.

Farrell G. (2001) From tall poppies to squashed weeds: why don't nurses pull together more. *Journal of Advanced Nursing* **35**, 26–33.

Gillham B. (2000) *Developing a Questionnaire*. Continuum, London.

Hinds R. & Harley J. (2001) Exploring the experiences of beginning registered nurses entering the acute care setting. *Contemporary Nurse* **10**, 110–116.

Horowitz M., Wilner N. & Alvarez W. (1979) Impact of Event Scale: a measure of subjective stress. *Psychosomatic Medicine* **41**, 209–218.

Kelly B. (1996) Hospital nursing: 'It's a battlefield!' A follow-up study of English graduate nurses. *Journal of Advanced Nursing* **24**, 1063–1069.

McCall E. (1996) Horizontal violence in nursing: the continuing silence. *The Lamp* April, 28–29.

McMillan I. (1995) Losing control. *Nursing Times* **91**, 40–43.

Quine L. (1999) Workplace bullying in NHS community trust: staff questionnaire survey. *British Medical Journal* **318**, 228–232.

Robson C. (1993) *Real World Research: a Resource for Social Scientists and Practitioner-Researchers*. Blackwell, Oxford.

Shalev A., Freedman S., Peri T., Brandes D. & Sahar T. (1997) Predicting PTSD in trauma survivors: prospective evaluation of self-report and clinician administered instruments. *British Journal of Psychiatry* **170**, 558–564.

Sundin E. & Horowitz M. (2002) Impact of Event Scale: psychometric properties. *British Journal of Psychiatry* **180**, 205–209.

Taylor B. (2001) Identifying and transforming dysfunctional nurse–nurse relationships through reflective practice and action research. *International Journal of Nursing Practice* **7**, 406–413.

Thomas S. & Droppleman P. (1997) Channelling nurses' anger into positive interventions. *Nursing Forum* **32**, 13–21.

Thomka L. (2001) Graduate nurses' experiences of interactions with professional nursing staff during transition to the professional role. *Journal of Continuing Education in Nursing* **32**, 15–19.

Turnbull J. (1995) Hitting back at the bullies. *Nursing Times* **91**, 24–27.

Wheeler H. (1998) Nurse occupational stress research 5: sources and determinants of stress. *British Journal of Nursing* **7**, 40–43.