This article provides a review of current knowledge on the problem of violence to nurses by patients and relatives. In particular, the article discusses the extent of such violence in nursing generally and across different specialties.

AIMS AND INTENDED LEARNING OUTCOMES

The aim of this article is to consider violence and aggression and to illustrate a number of risk factors which should assist you in identifying high-risk patients and situations. After reading the article, you should be able to:

- Analyse the concept of aggression and the problems associated with measuring this behaviour
- Discuss the prevalence of violence in the UK as a whole and in workplace settings in particular
- Discuss the prevalence of violence and risk factors in different nursing specialties
- Recognise a variety of patient interaction and nurse factors which may predict an increased risk of violence across healthcare settings.

INTRODUCTION

Over the past ten years, there has been increasing concern expressed about the problem of violence directed by patients (and to some extent relatives) against nurses. This concern has been expressed both from within the nursing profession and by government and employee organisations (DHSS 1988). The problem of violence to healthcare professionals in general, and nurses in particular, is now firmly established as a high priority issue, mainly because it has significant implications for individual nurses as well as their colleagues, families and employers.

A large number of research studies investigating different aspects of this problem have been published since the early 1980s. The past three years have seen the publication of the first generation of books dealing specifically with the problem of violence in healthcare settings, for example Wykes (1994). This article will review some of the main findings from this extensive research effort. Some firm conclusions about the extent of violence for different groups of nurses, and the situations where the risk of assault is greater, will then be drawn. This will hopefully enhance the nurse’s ability to recognise high-risk situations, thus being in a position in the future either to avoid them or to be prepared to deal with them using verbal and non-verbal skills. However, when discussing violence, we should always bear in mind that it is a highly complex human behaviour with many biological, psychological and social factors, acting together and separately.

THE CONCEPT OF AGGRESSION

The first step in examining this issue is to define the types of behaviour which constitute the problem of violence and aggression against nurses. The terms ‘violence’ and ‘aggression’ have certain subtle distinctions, but will be used interchangeably in this article.

Baron and Richardson (1994) define aggression as ‘any form of behaviour which is intended to injure someone physically or psychologically who is motivated to avoid such treatment’. Unfortunately, in research into violence in healthcare settings, there is little consistency between studies in terms of the types of violence under examination. Any violent incident can be considered along a number of dimensions, including relatively objective aspects such as:

- Nature – physical or verbal
- Target – self, others, objects
- Perpetrator – patient, relative, colleagues

This article relates to the UKCC Professional Development category: Reducing risk.
Injury – none, minor, major.

More subjective aspects which may be considered are the degree of premeditation or impulsivity; the goal of the behaviour (proactive/instrumental or reactive/emotional) and the psychological injury sustained by the victim.

Some studies go beyond the concept of a 'violent incident' to include a wide range of aversive or coercive behaviours which may be experienced at work within their remit, for example verbal threats, verbal abuse and non-verbal threats. This inconsistency makes comparisons across studies, and firm conclusions, difficult to draw, especially with regard to prevalence. There is now a growing tendency to use relatively reliable and valid measures, such as the Staff Observation Aggression Scale (SOAS) (Palmstierna and Wistedt 1987) or the Rating Scale for Aggressive Behaviour in the Elderly (RAGE) (Patel and Hope 1992).

The SOAS, for example, is a widely-used assessment tool in mental health settings which enables the systematic recording of the nature of an aggressive behaviour, the preceding events, the consequences which ensued and any interventions which were employed. This increasing employment of consistent assessment measures should improve the comparability across studies, since researchers will at least be focusing on comparable behaviours. The focus in this article will be on physical aggression to staff by patients, but this is not to deny the importance of these other types of workplace violence.

VIOLENCE IN SOCIETY AND THE WORKPLACE

Violence to nurses takes place within a much wider social context and should always be considered within the larger picture of developments within society. Violence in the healthcare services often reflects the community in which that service is provided (Walker and Caplan 1993). It is important to emphasise, therefore, that the recent concern about violence to nurses is part of a larger concern regarding violence in the wider UK society, as well as apparent increases in such violence.

When compared internationally, the UK has a relatively small problem to deal with. The homicide rate for England and Wales of 0.7 per 100,000 of population (1.3 in Scotland) is one of the lowest in the world. The US homicide rate is 12 times higher (Blackburn 1993) and this undoubtedly impacts upon healthcare and nursing. There are about 800 workplace homicides a year in the US (Bulatao and Vandenbos 1996) and armed security guards are routinely used in healthcare settings (Kronberg 1983).
There is a general perception that violent crime is more common in the 1990s than it was in earlier decades. This perceived violent 'crime wave' is a major element in recent political discourse and the politicisation of the issue should warn us against simplistic conclusions (Shah 1993a). Crimes of violence recorded by the police more than doubled in frequency between 1981 and 1995 (Mirrlees-Black 1997). However, a more accurate estimate comes from the British Crime Survey (BCS) which indicates that violent crime increased overall by a little over 5 per cent during this period.

In addition, again according to the BCS, some of the most frightening violent crimes, such as attacks by strangers and mugging, have not increased appreciably in frequency since 1981. The major contributor to the apparent rise in overall violent crime is a two-fold increase in occurrence and/or reporting of domestic violence (about 1,700,000 incidents in 1995) and a fourfold increase in assaults by acquaintances, for example by 'friends' (about one million incidents in 1995) (Mirrlees-Black 1997).

Violence to nurses takes place within this wider social context, but is also a specific feature of a narrower problem — that of violence in the workplace. Employees from a wide range of occupations face the potential of violent assault, including housing office staff, teachers, transport workers, delivery roundsmen, pub staff, park keepers, traffic wardens, inspectors and retail and finance staff, as well as nurses and other healthcare professionals (Poyner and Warne 1996).

Essentially, any job involving direct contact with members of the public brings with it the potential risk of assault. Nevertheless, certain occupations have a higher risk and there is extensive evidence that nursing is a relatively high-risk occupation. Mackay (1994) uses BCS data to show that (female) nurses have at least three times the average risk of job-related violence and threats, when compared with the average rate across all occupations.

Within the healthcare professions, nurses in particular often face the highest risk of assault across the professions. In psychiatric settings, about 90 per cent of reported assaults are committed against nurses, who often make up less than 60 per cent of the clinical workforce (Whittington 1994). Data from the most extensive NHS violent victimisation survey (Health Services Advisory Committee 1987) indicated that 37 per cent of student nurses, 20 per cent of staff nurses and 17 per cent of charge nurses had suffered minor physical injury as a result of a workplace assault over a 12-month period. Apart from ambulance staff, no other occupational group reported more than half these levels of violent victimisation at work. Nurses also reported relatively high levels of incidents involving the use of a weapon and threats compared to most other groups.

**NOW DO TIME OUT 4**

Reflect on the last time you encountered aggression from a patient, whether physical or verbal. What exactly happened? Why was the person aggressive? What led up to the incident? What intervention did you or your colleagues employ to manage the situation? Did the incident lead to any changes in the way aggression is dealt with in your workplace environment?

So far, this article has attempted to place the problem of violence to nurses in some wider contexts. What is not clear from what has been discussed however is how the different specialities within nursing differ with regard to their experience of violence. It may be possible to generalise across the profession as a whole and identify processes that occur in all nurse/patient interactions, thus applying these regardless of the specialty. An attempt to generalise in this way will be attempted below, but first it is necessary to consider different settings in which nurses work with regard to the specific problem to be addressed.

**VIOLENCE TO NURSES IN SPECIFIC SETTINGS**

**Psychiatric inpatient units** The HSAC (1987) survey indicated that the prevalence of violent victimisation was higher among staff working in psychiatric settings than in any other NHS specialty: 31 per cent had been threatened in the preceding year, 27 per cent had received minor injuries from an assault and nearly 27 per cent had received major injuries (this latter rate was slightly exceeded by learning disabilities staff).

Violence against nurses working with mentally-disordered people has been recognised as a problem for at least a century, and certainly for longer than in any other nursing specialty. In a recent review of the literature, Whittington (1994) concluded that a disproportionate number of assaults on staff in this setting are directed against nurses, and that the average rate of reported assaults in psychiatric units is about one every 11 days, although this average obscures significant peaks and troughs in frequency. A tiny minority (1-2 per cent) of reported assaults result in significant physical injury.

In terms of the cause, we can apply the dis-
Fig. 1. Some predictors of violence to nurses (based on Poyner and Warne 1986)

PATIENT RISK FACTORS
- History of violence
- Intoxicated
- In pain
- Actively psychotic
- Confused
- Loud/overactive

NURSE RISK FACTORS
- Student or agency
- Younger
- Lack of experience
- Distressed
- Poor communication skills

INTERACTION RISK FACTORS
- Frustration of patients
- Activity demanded from patient
- Intrusion on patient
- Pain caused to patient

INCREASED RISK OF VIOLENCE TO NURSE

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patients acting aggressively in a medium secure unit survey by Torpy and Hall (1993).

**Elderly mentally ill people** Staff working in the elderly care setting had the second highest rate of minor injuries (21 per cent) in the HSAC (1987) survey. Of elderly patients on a group of wards for people who are mentally ill, 45 per cent were aggressive over a three-day period in one study (Patel and Hope 1992), although the definition of aggression in this study was very broad (ie. including ‘being unco-operative’). With regard to physical aggression only, 31 per cent of patients attempted to bite, scratch, spit or kick at others; 18 per cent attempted to hit others; 12 per cent pushed or shoved others and 10 per cent attempted to kick others. The majority of aggressive patients were aggressive to ward staff.

Patients with a dementia diagnosis were significantly more likely to be aggressive than patients with other diagnoses (schizophrenia, affective disorders or mental handicap). Shah (1993b) looked at elderly people referred by GPs to an elderly mentally ill service in London and found that 14 per cent exhibited aggressive behaviour as an important part of their presentation. Aggressive patients were more likely than non-aggressive patients to be living in an elderly person’s home on referral and to be admitted compulsorily. They were less likely to be in receipt of services (for example, community psychiatric nursing) and dementia was not a significant risk factor in this group. Patient/staff conflict has been cited as a significant trigger event for demening inpatients (Colenda and Hamer 1991).

**Learning disability** Alongside psychiatric and elderly care settings, staff working with people who have a learning disability also face a high risk of exposure to aggression.

In the HSAC (1987) survey, major injuries from patient assault were highest among this group of staff (2 per cent over one year requiring medical assistance) and 20 per cent of staff suffered minor injuries. While again, the problem of working with aggressive learning-disabled people has been known for many years, research has tended to rely on case studies and focus on treatment approaches.

Ghazuddin and Ghazuddin (1992) note the exclusion of people with learning disabilities from studies of inpatient aggression and conducted their own study on a unit in a UK university hospital. Of people admitted to the learning disability unit, 35 per cent were assaultive towards staff over a one-year period. There was a tendency for people with learning disabilities with associated psychiatric problems, and/or severe disability, to be involved in more incidents. Three per cent of assaults resulted in major injuries, such as fractures.

Shah (1992) examined a high dependency unit and found a much higher rate of assaults per patient. Violent patients tended to be, on average, younger, more likely to have abnormal EEGs, and had a significantly higher incidence of family psychiatric history. Cottle et al (1995) examined psychological reactions in staff assaulted by people with learning disabilities. Anxiety among assaulted staff was significantly higher in the week after the assault compared to prior to the assault, but returned to near baseline levels at one month. Many staff had high expressed emotion with regard to the aggressive patient after the assault, usually based on critical comments about the client, and tended to make external and uncontrollable attributions about the event.

Collins and Halman (1996) examined changes in aggressive behaviour among a group of learning disabled people who moved from a hospital setting to smaller residential units. Aggression to staff decreased slightly after the move, but aggression to other residents decreased significantly. Unfortunately, the authors do not explore possible reasons for this reduction of violence between residents.

**General hospitals** In comparison to psychiatric and learning disability nurses, violence to staff working with physically ill people has been virtually ignored. The HSAC (1987) confirmed the impression that A&E departments are relatively dangerous, with 1.8 per cent of staff reporting major injury over 12 months, a rate comparable to psychiatric and learning disability settings.

Again, there is evidence that the majority of assaults in A&E are directed at nurses, and involve kicking and punching (Cembrowicz and Shepherd 1992). However, levels of minor injury (such as bruising) in A&E (20 per cent) were lower than those in psychiatric and learning disability settings in the HSAC (1987) survey, and actually lower than those on medical wards within general hospitals.

Whittington et al (1996) attempted to survey violence to staff across all departments of a general hospital. Of general hospital staff overall, 21 per cent had been physically assaulted over a one-year period; 90 per cent of assaults on staff occurred beyond the A&E department with high prevalence on medical wards and trauma/orthopaedic units. Nurses at all levels were more likely to be assaulted than any other occupational groups.

Assaulted staff were significantly younger and less experienced than non-assaulted staff but there was no difference between the sexes in rates of assault. Incidents were preceded, most commonly, by confusion and/or high arousal in the patient, and where provision of care or treatment was often aversive and intrusive. Delay in receiving care or treatment was also an important factor.
Violence to staff in the community is also relatively under researched. The HSAC (1987) survey found that levels of physical injury from assaults was lowest among this group, but there is increasing recognition of the particular problems faced by community staff. There may be a tendency for comparatively low levels of aggression, but the isolation of these staff puts them at a higher risk of severe injury if an incident does occur, when compared to the relatively secure and controlled environments in hospitals. In a study of verbal aggression (Adams and Whittington 1995), CPNs reported lower levels of aggression than hospital nurses, but higher levels of anxiety following the incident, presumably because their relative isolation and the potential for more dangerous behaviour to occur.

GENERAL PROCESSES IN THE VIOLENT NURSE/PATIENT INTERACTION

Clearly, there is evidence of violence to nurses across a wide range of specialties. Some aspects of the problem of violence in these different specialties will be specific to that particular setting. However, there are many basic psychological processes that occur in any nurse/patient interaction, and it is possible to identify some general principles for the identification of high-risk situations and the management of incidents. In this section an attempt will be made to identify these general processes on the basis, where possible, of evidence.

Whittington's (1994) evidence-based review of violence predictors in psychiatric inpatient settings was organised within the framework developed by Poyner and Warne (1986). This framework and review can be adapted and enlarged to incorporate risk factors for violence to nurses across the range of specialties discussed above. Figure 1 (page 52) sets out the main predicted risk factors of violence to nurses.

Essentially, two main factors are important in generating a violent incident: firstly, a patient who is highly aroused and/or unable to clearly understand what is going on around him or her (patient factors); and secondly, an aversive interaction with a nurse, for example a nurse who is doing something to him or her which causes physical or psychological pain (interaction factors).

Many factors which bring a person into contact with healthcare services also impair that person's ability to understand the behaviour of others, for example active psychosis, drug and alcohol intoxication and general intellectual impairment. In addition, most healthcare procedures, performed for the benefit of the patient, are also aversive to experience, in that they are painful or threatening. It is this combination of aversive stimulation and impaired cognition which occurs in most nursing specialties and creates the risk of violence. This combination becomes even more risky if certain individual nurse factors are also operating. These are factors which make the patient perceive the nurse as aversive - relative youth, and provocative verbal and non-verbal skills under stress, are two such nurse factors.

NOW DO TIME OUT 7

Read the article on pages 22-25 to develop your understanding of how to avoid aggressive incidents even further.

CONCLUSION

The literature on violence in health care and violence to nurses is now very extensive. In this article we have focused mainly on the prevalence of this type of violence and potential risk factors. There is insufficient space to consider all of the issues surrounding aggression to nurses, and the texts listed should be consulted as further reading in the area, however, it should be clear from the article that aggression is a complex topic which needs to be considered within its social context; that violence to nurses is common and occurs to some extent across most specialties; and that a number of risk factors are reasonably well-established as useful and effective in identifying problem situations.

NOW DO TIME OUT 8

Review the intended learning outcomes at the beginning of this article to see if you have achieved them. You may wish to take up some of the further reading, and re-read the article, before tackling the assessment.

FURTHER READING


NOW DO TIME OUT 5

Why do you think that younger and less experienced staff may be more at risk in a general hospital? How might experienced staff differ from newer staff? Is it possible that younger staff are less tolerant of violence at work and, therefore, more likely to report incidents of violence?
Assessment


TO COMPLETE THE ASSESSMENT:
- Follow the instructions on the answer sheet found in your copy of the journal.
- Mark the title of the article as Violence to nurses: prevalence and risk factors. The number is 416.
- You should only answer a question when you are confident that you can do so correctly.
- If you should wish to change your selection, use a soft eraser to remove or lighten the mark that you do not want to appear and ensure that the answer(s) that you have finally selected show up boldly.
- Send it with your free assessment voucher or £10 fee (£15 for non-RCN members) to: RCN CE Articles, Royal College of Nursing, Freepost, Cardiff CF5 1ZZ, by October 22, 1998 (cheques payable to RCN).
- If successful, you will be informed in writing. Five CEPs are awarded for successful completion of this CE article assessment. You are entitled to one retake if you are unsuccessful.

FURTHER ANSWER SHEETS CAN BE OBTAINED BY CALLING 0181 423 1066

PROFILE 1

Mrs Smith, a 25-year-old woman with a history of aggression towards nurses while psychotic, is admitted to a psychiatric inpatient unit on a section in a distressed and agitated state. She complains of a voice emanating from the back of her head which tells her that staff intend to mutilate her.

1. If Mrs Smith verbally abuses a nurse who approaches her with food or medications. This is a form of aggression if:
   a) It is done in a loud voice
   b) The nurse is upset by the abuse
   c) It is accompanied by physical violence
   d) It is intended to psychologically harm the nurse
   e) It includes swear words

2. Staff could assess the nature and frequency of Mrs Smith's aggression using a relatively reliable and valid measure such as the:
   a) Impact of Events Scale
   b) Self Evaluation Questionnaire
   c) Assertiveness and Abusiveness Schedule
   d) Staff Observation and Aggression Scale
   e) Violence Checklist

3. Which of the following is a well-established biological factor in human aggression which might be implicated in aggressive acts by Mrs Smith?
   a) Hemispheric dominance
   b) Neurological factors, such as frontal lobe lesions
   c) Media viewing
   d) Previous history of violence
   e) Dopamine supersensitivity

4. Cognitive processes, such as appraisals and attributions, are important in the generation of aggressive behaviour because they are concerned with a person's:
   a) Unconscious, aggressive urges
   b) Safety needs
   c) History of violence
   d) Tendency to associate aggression with success
   e) Tendency to interpret the behaviour of other people as threatening

5. If Mrs Smith tells a nurse that she wants to go home and she has to tell her she cannot because she is too unwell, this is an example of:
   a) Catharsis
   b) Frustration

6. The relatively common use of armed security guards in some US healthcare settings might be related to the US homicide rate being approximately:
   a) Twice as high as that of the UK
   b) Half that of the UK
   c) Fifty times that of the UK
   d) Twelve times that of the UK
   e) Five hundred times that of the UK

7. Between 1981 and 1995, violent crime recorded by the police in the UK:
   a) Halved
   b) Dropped to zero
   c) Exceeded rates for New York City
   d) More than doubled
   e) Returned to 1945 levels

8. The British Crime Survey indicates that attacks by strangers:
   a) Have not increased appreciably since 1981
   b) Lead to post-traumatic stress disorder
   c) Are grossly over-reported
   d) Fell by 60 per cent over the 1980s
   e) Are not as distressing as domestic assaults

9. Psychiatric nursing staff such as those caring for Mrs Smith:
   a) Should not worry, because only unskilled staff get assaulted
   b) Are, statistically, at much lower risk of assault than other members of the multidisciplinary team
   c) Have a 90 per cent chance of being assaulted by her on each shift
   d) Are, statistically, at much greater risk of assault than other members of the multidisciplinary team
   e) Have a 10 per cent chance of being assaulted by her on each shift

10. In terms of risk factors, which of the following should not be noted as potentially significant in Mrs Smith's case:
    a) Being aged under 30
    b) Being detained under the Mental Health Act
    c) Being female
    d) Having a history of previous violence
    e) Having a history of violent suicide attempts
**PROFILE 2**

Mr Jones is a 35-year-old man who arrives at an A&E department in an intoxicated state. He has fallen down in the street and cut himself superficially on some glass. He is carrying a copy of the Patient's Charter, a bottle of sherry and a knife, and is distressed, screaming and insistent on receiving treatment immediately.

**11** The proportion of A&E staff suffering a major physical injury each year following patient assault. Is:

a) Less than 1 per cent  
b) Much greater than the rate for staff working with people with a learning disability  
c) Much greater than the rate for staff working in psychiatric settings  
d) More than 80 per cent  
e) Similar to the rate for staff in learning disability and psychiatric settings

**12** Aggression to nurses in the general hospital setting has been found:

a) On medical wards  
b) On orthopaedic wards  
c) In A&E  
d) All of the above  
e) None of the above

**13** Staff assaulted in a general hospital are, on average:

a) Taller than non-assaulted staff  
b) Older than non-assaulted staff  
c) Younger than non-assaulted staff  
d) More experienced than non-assaulted staff  
e) More likely to be female than non-assaulted staff

**14** Mr Jones presents a high risk of aggression in this setting because:

a) He is highly aroused and in pain  
b) He may be disinhibited through intoxication  
c) He is psychotic  
d) He has a personality disorder  
e) Both (a) and (b)

**15** The safest way to deal with the situation involving Mr Jones is to:

a) Tell him to shut up and go to the back of the queue  
b) Explain to him that the Patient's Charter is a work of fiction  
c) Encourage him to express any negative emotions  
d) Briefly assess the situation in more detail and make a decision based on that assessment  
e) Call the police

**16** A nurse puts his hand on Mr Jones' arm in order to comfort him. Mr Jones may interpret this:

a) Negatively, as a patronising gesture  
b) Negatively, as an attempt to restrain him  
c) Positively, as a soothing gesture  
d) Negatively, as an attack  
e) Any of the above; touch should be used carefully in this situation

**17** A nurse dealing with Mr Jones finds himself feeling extremely irritated by his behaviour. This will become a problem:

a) Only if it interferes with the effective management of the situation  
b) Because nurses should never have negative feelings about patients  
c) And the nurse should withdraw from the interaction immediately  
d) Which requires counselling from the occupational health team  
e) Which should never be discussed with a line manager

**18** Which of the following procedures might be perceived as potentially painful or threatening by Mr Jones, thus maintaining the risk of aggression?

a) An X-ray  
b) Cleaning and dressing his wound  
c) Receiving an injection  
d) Any of the above  
e) None of the above

**19** Which of the following is an example of aversive stimulation?

a) Staff-patient ratio  
b) Giving an injection  
c) Feelings of anger and anxiety among nursing staff  
d) The average age of nursing staff  
e) Talking to patients in a way they find comforting

**20** Which of the following is an example of cognitive appraisal?

a) Thinking you would like to hit someone  
b) Deep breathing  
c) Calculating the amount of medication to sedate a patient  
d) Judging that an outstretched hand is an attack rather than an attempt at reassurance  
e) Discussing professional performance in violent situations