Journal of Psychiatric and Mental Health Nursing, 2008, **15**, 492–499

Patient aggression in clinical psychiatry: perceptions of mental health nurses

E. J. JONKER[1] RN MSc, P. J. J. GOOSSENS[2] RN MScN, I. H. M. STEENHUIS[3] RN PhD & N. E. OUD[4] RN MScN

[1]*Researcher,* [2]*Manager of Quality Assurance, Innovation and Research, Adhesie Mental Health Care, Deventer,* [3]*Associate Professor, Free University, Faculty of Earth and Life Sciences, and* [4]*Partner, Oud Consultancy, Amsterdam, the Netherlands*

Correspondence:
P. J. J. Goossens
Adhesie GGZ
Department KIO
Nico Bolkensteinlaan 1
7416 SB Deventer
The Netherlands
E-mail: p.goossens@adhesie.nl

JONKER E. J., GOOSSENS P. J. J., STEENHUIS I. H. M. & OUD N. E. (2008) *Journal of Psychiatric and Mental Health Nursing* **15**, 492–499
Patient aggression in clinical psychiatry: perceptions of mental health nurses

Mental health nurses are faced with an increasing number of aggressive incidents during their daily practice. The coercive intervention of seclusion is often used to manage patient aggression in the Netherlands. However, GGZ Nederland, the Dutch association of service providers for mental health and addition care, has initiated a project to decrease the number of seclusions in clinical psychiatry. A first step in this project is to gain insight into the current situation: the perceived prevalence of patient aggression, the attitudes of mental health nurses towards patient aggression and those socio-demographic and psychosocial factors that contribute to the use of coercive interventions. A survey was undertaken among 113 nurses from six closed and semi-closed wards. In this survey, two questionnaires were used: (1) the Attitude Toward Aggression Scale; and (2) the Perceptions of the Prevalence of Aggression Scale. Variables derived from the Theory of Planned Behaviour were also measured. Nurses reported being regularly confronted with aggression in general and mostly with non-threatening verbal aggression. They perceived patient aggression as being destructive or offensive and not serving a protective or communicative function. The nurses generally perceived themselves as having control over patient behaviour (i.e. considerable self-efficacy) and reported considerable social support from colleagues. Although the nurses in this study were frequently confronted with aggression, they did not experience the aggression as a major problem.

Keywords: aggression, attitude, mental health nursing, perceptions, prevalence, psychiatry

Accepted for publication: 9 January 2008

Introduction

Although considerable research has been conducted on aggression in mental health care settings during the past 30 years, the problem still exists and is frequently a topic of discussion. The problem of aggression exists in institutions, including clinical psychiatric settings, worldwide. In Dutch mental health care settings, an increased incidence of patient aggression has actually been observed (Peerdeman 2006). This has prompted 'GGZ Nederland', the Dutch association of service providers for mental health and addition care, an organization with which almost all institutes for mental health care in the Netherlands are associated, to initiate a project specifically aimed at decreasing the number of seclusions used in clinical psychiatry.

According to a large number of studies on aggression and violence in psychiatry, the occurrence of violent incidents as well as their management must be regarded as a product of the interaction between several variables. Among the predictors of the incidence of violence and

aggressive incidents within the psychiatric sector are: patient variables such as psychopathology (Beck *et al.* 1991, Oster *et al.* 2001); environmental or setting variables such as ward characteristics (Bouras *et al.* 1982, Nijman & Rector 1999, Schanda & Taylor 2001); interaction variables such as adverse stimulation (Sheridan *et al.* 1990); and staff variables such as education and attitudes (Schanda & Taylor 2001). In view of the nature of their contact with patients, nurses are more often involved in patient aggression and violence than other health care professionals (Lanza 1985, Rippon 2000, Whittington & Higgins 2002).

In the present study, it is attempted to gain insight into those nursing attitudes which influence the nurses' behaviour towards patient aggression within a mental health setting. The Theory of Planned Behaviour (TPB) is used to explain the nurses' behaviour (Ajzen 1991). According to this theory, behaviour can be explained by the intention to present this behaviour and the intention can be explained by attitudes, social norms and perceived behavioural control (Ajzen & Fishbein 1980, Ajzen 1991). According to Irwin (2006), for example: 'The nurses' role in the management of aggression is grounded in self-awareness and an acknowledgement that patients and situations are uniquely individual' (p. 316).

Furthermore, international studies of patient aggression in clinical psychiatry point to cultural differences in the management of aggression. In Dutch studies, a rather high percentage of aggressive incidents have been found to be followed by seclusion of the patient (Janssen *et al.* 2005). The duration of the seclusion in mental health care settings in the Netherlands is also longer, compared with other European countries, such as Italy, Germany, Denmark, Sweden and Scotland (Kok & Berghout 2002). In 1995, Jansen conducted a cross-cultural study on differences in the attitudes of mental health nurses towards patient aggression, measured with the attitude towards aggression scale (ATAS). The attitudes towards management of patient aggression differ; Norwegian nurses are horrified by seclusion, Finnish nurses by high doses of neuroleptic medication and UK nurses by the use of mechanical restraints (Bowers *et al.* 1999, Jansen *et al.* 2006b). Mechanical restraint means that a part or all of a person's body has a device or devices applied to it that restricts that person's free movement (Victorian Department of Human Services 2006).

Aim and research questions

The aim of the present study was thus to take inventory of the current situation regarding nurses' perceptions of the prevalence of aggression, their attitudes towards patient aggression and the determinants of the use of coercive interventions, such as seclusion and mechanical restraint. The following research questions were formulated:

- What are the nurses' perceptions of the prevalence of aggression?
- With which types of aggression do nurses think they are confronted most often during daily practice?
- What are the attitudes of the nurses towards aggression?
- Do the nurses perceive behaviour control in the management of patient aggression?
- Do the nurses receive social support from colleagues when confronted with patient aggression?
- Do the nurses intend to use less coercive interventions towards their patients?

Methods and materials

A quantitative, cross-sectional research design using questionnaires to assess the relevant variables was used. Data were collected between February and March 2007 on six closed and semi-closed inpatient wards from a single mental health institution in the Netherlands. The mental health institution is located in the east part of the Netherlands, providing mental health care in a region of 373 242 inhabitants, 2.3% of the total Dutch population. In the institution, 8277 patients are receiving treatment, only 353 patients are receiving this treatment as inpatients, the vast majority of the patients receives treatment on an outpatient basis. The closed and semi-closed wards are divided in wards for short-term clinical treatment, wards for long-term clinical treatment and wards for treatment of geriatric psychiatric inpatients. Closed wards are wards that are locked permanently; semi-closed wards are wards that are only locked if necessary. Patients are admitted to inpatient treatment with all kinds of psychiatric diagnoses, including mood disorders, psychotic disorders and personality disorders.

The present study distinguishes itself from previous studies on aggression in mental health settings by its assessment instruments. A combination of two existing instruments, the ATAS and the Perceptions of the Prevalence of Aggression Scale (POPAS) and questions based on the TPB, are used to examine not only the nurses' perceptions of the prevalence of aggression and their attitudes towards aggression but also determinants in the use of coercive interventions. As far as we know, this combination of assessment instruments has never been used before.

Questionnaire to measure attitudes towards patient aggression

The ATAS was used to measure the attitudes of the nurses towards patient aggression. The development of this ques-

tionnaire has been described in earlier studies (Jansen *et al.* 1997, Jansen *et al.* 2005b, Jansen *et al.* 2006a), and the ATAS has been found to constitute a valid measure of the attitudes of nurses towards patient aggression. In the present study, a Cronbach's alpha of 0.70 was found for the 18 items that the nurses had to rate as more or less relevant definitions of aggression on a 5-point scale, varying from totally agree (5) to totally disagree (1). Five types of attitudes or subscales are measured:

1. offensive attitude: viewing patient aggression (including verbal aggression) as insulting, hurtful, unpleasant and unacceptable behaviour (seven items);
2. communicative attitude: viewing patient aggression as a signal resulting from the patient's powerlessness and as aimed at enhancement of the therapeutic relationship (three items);
3. destructive attitude: viewing patient aggression as an indication of threat or an actual act of physical harm or violence (three items);
4. protective attitude: viewing patient aggression as the shielding or defending of physical and emotional space (two items); and
5. intrusive attitude: viewing patient aggression as the expression of an intention to damage or injure others (three items).

Questionnaire to measure perceptions of the prevalence of patient aggression

To measure the nurses' perceptions of the prevalence of aggression, the POPAS was used (Oud 2001). The POPAS is a 16-item questionnaire, which requires staff members to rate the frequency with which they have been confronted by or have witnessed different types of aggression during the course of the past year at their work. The aggression may involve interpersonal conflict, the damage of property or self-inflicted harm (Oud 2001, Nijman *et al.* 2005a).

Following pre-testing of the POPAS, certain types of aggression have been combined and an abbreviated version of the questionnaire has been developed. Mild physical violence and severe physical violence were combined to constitute physical violence; mild violence against self and severe violence against self were combined to constitute violence against self; and attempted suicide and completed suicide were combined to constitute suicide attempt. The aforementioned categories of aggression were combined because it was expected that the interpretations of 'mild' vs. 'severe' would not differ greatly from each other. Sexual assault and rape were excluded altogether because of their sporadic occurrence. The 12 remaining types of aggressive behaviour were: (1) non-threatening verbal aggression: shouting, cursing, yelling, not being perceived as a clear threat; (2) threatening verbal aggression: making clear verbal threats of violence, perceived as frightening and threatening with emotional distress as a result; (3) humiliating aggressive behaviour: expressing clear personal insults, abusive cursing, name calling, making discriminating remarks/gestures or spitting, all of which is perceived as making an impression and bringing down pride and self-esteem; (4) provocative aggressive behaviour: if someone has the intention to fasten a quarrel upon others in order to bring forth a social negative response; (5) passive aggressive behaviour: irritant, annoying, resistive and counteractive behaviour, without at one moment being openly aggressive; (6) aggressive splitting behaviour: behaviour that divides a group in two opposite poles; (7) threatening physical aggression: behaviour that is perceived as threatening; (8) destructive aggressive behaviour: behaviour that causes damage; (9) physical violence: behaviour that will harm or cause injury; (10) violence against self: mutilating behaviour against oneself, with minor or serious injury as a result; (11) suicide attempt; and (12) sexual intimidation/harassment: behaviour ranging from making obscene gestures to threatening with assault or rape. The response options ranged from (1) never to (5) frequently and the participants were also asked to estimate the absolute number of experiences with each type of aggression during the course of the past year at their work. Despite the collapsing of certain forms of aggression into a single category, the internal consistency of the abbreviated version of the POPAS was found to be good with a Cronbach's alpha of 0.80.

Assessment of the determinants of the use of less coercive interventions

For each type of aggression, identified by means of the POPAS, the determinants of the use of less coercive interventions were assessed. This included assessment of the attitudes of the nurses towards patient aggression, the perceived degree of social support from colleagues and the perceived degree of control (self-efficacy) with respect to the behaviour of patients. The questions addressing the determinants of using less coercive interventions were based on the TPB and measured on a 5-point scale, which varied from totally agree (5) to totally disagree (1). The Cronbach's alpha of these submitted questions appeared to be 0.63.

Sample size

A survey among 113 nurses was conducted. All of the nurses were asked to complete the questionnaire within a period of 4 weeks. Of these 113, 85 nurses completed the questionnaire, resulting in a response rate of 75%.

Data analysis

Descriptive analyses were undertaken but only after the dataset was checked for missing or mistaken input. For participants with less than 10% missing data, mean substitution was used to determine the value of missing data (Altman 1991). Data from three participants were removed from further analyses because of more than 10% missing data.

The percentages, means and standard deviations were next calculated to characterize the population and determine the scores on the main variables including the ATAS, POPAS and determinants of the use of less coercive interventions.

The mean scores on the ATAS were next compared with the mean scores from an earlier study (Jansen *et al.* 2006a). In order to see if the groups differed significantly from each other, one sample *t*-test was used.

Independent *t*-tests were used to test for differences on the main variables of confrontation with aggression, attitude, social support, perceived behavioural control and intention depending on age, gender, education and years of nursing experience.

Finally, linear regression analyses were conducted to identify possible predictors of being confronted with aggression. A stepwise regression analysis was conducted with age, gender, education and years of nursing experience entered in the first step and the psychosocial variables of attitude (e.g. concerning importance to use less coercive interventions), perceived behavioural control, subjective norms (e.g. concerning social support) and intention to use less coercive interventions entered in the second step.

For all of the analyses, the data were processed using the Statistical Package for the Social Sciences (SPSS 14.0 for Windows).

Results

Demographic characteristics of the nurses

More females (68%) than males were part of the sample. The majority of the nurses had a non-bachelor degree in nursing and 14 respondents were nursing students at the time of questionnaire administration. The mean number of years of working experience was 12.96 (±11.0). Of the 85 respondents, 40 worked full-time (47%). The Control and Restraint Course, a training in aggression management, had been completed by 74 of the 85 nurses (87.1%).

Perceptions of the prevalence of aggression

In Table 1, the mean scores are reported for 'experienced confrontation with aggression' on a 5-point scale and the estimated number of actual confrontations during the past 12 months. The majority of the nurses reported 'never/rarely' being confronted with aggression (also see Table 2). Although the scores between nurses working on a closed ward and nurses working on a semi-closed ward differed widely and the differences between the two groups were not statistically significant, those nurses working on a closed ward reported being confronted more with aggression than those nurses working on semi-closed ward (see Table 3). A striking finding in Table 1 is the height of the standard deviation on 'estimated number of actual confrontations with aggression'. This is caused by the broad range (0–1188) in the estimated number of actual confrontation with aggression as reported by the participants.

Table 1
Mean scores (and standard deviations) on the Perceptions of the Prevalence of Aggression Scale

Experienced confrontation with aggression (1–5)	2.46 (0.76)
Estimated number of actual confrontations with aggression	181.50 (220.56)
Anxiety towards aggression (1–5)	2.30 (0.62)
Judged importance of using less coercive interventions with patients (1–5)	2.96 (0.81)
Social support from colleagues (1–5)	4.39 (0.50)
Perceived behavioural control (i.e. self-efficacy) (1–5)	3.99 (0.58)
Intention to use less coercive interventions with patients (1–5)	2.81 (0.83)

Types of aggression nurses report confronting most during daily practice

For some 60% of the confrontations with aggression, the nurses reported being confronted with non-threatening verbal aggression (Table 2). This was followed by passive aggressive behaviour in some 30% of the cases. A total of 80% of the nurses reported 'never/rarely' being confronted with sexual intimidation. Significant predictors of being confronted with aggression were age and years of nursing experience; being older and greater nursing experience were associated with a reduced incidence of being confronted with aggression (see regression results in Table 4).

Attitudes of nurses towards patient aggression

In the present study, the highest scores were found for the view that patient aggression is destructive and offensive. The lowest scores were found for the view that patient aggression is protective or communicative. Male nurses found it significantly more important to use less coercive interventions and also had a higher intention to use less of these interventions.

Table 2
Percentages of nurses confronted with different types of aggression

Confrontation with aggression	Never/rarely	Now and than	Often/frequently
1. Non-threatening verbal aggression	7.1	32.9	60
2. Threatening verbal aggression	51.7	32.9	15.3
3. Humiliating aggressive behaviour	57.7	35.3	7
4. Provocative aggressive behaviour	47.1	35.3	17.6
5. Passive aggressive behaviour	20	48.2	31.8
6. Splitting aggressive behaviour	40	30.5	29.5
7. Threatening physical aggression	42.4	34.1	23.5
8. Destructive aggressive behaviour	65.9	21.2	12.9
9. Physical violence	76.5	14.1	9.4
10. Violence against self	56.4	22.4	21.2
11. Suicide attempts	75.3	17.6	7.1
12. Sexual intimidation/harassment	80	12.9	7.1
Total confrontation	51.6	28.1	20.2

Degree of self-efficacy with regard to the management of aggression

Non-bachelor-educated nurses showed significantly higher self-efficacy scores for the management of patient aggression (i.e. higher behavioural control scores) than their bachelor-educated colleagues (Table 3). Those nurses with more than 12 years of nursing experience and nurses of an older age also showed significantly higher self-efficacy scores for the management of patient aggression than their less experienced colleagues.

Perceived degree of social support from colleagues when confronted with patient aggression

The overall mean scores for the perceived receipt of social support from colleagues when confronted with patient aggression was 4.39 with a standard deviation of 0.50 (Table 1). This item was measured on a 5-point scale and the results show that the nurses perceive considerable support from colleagues when confronted with patient aggression. Nurses with more working experience and nurses working at a semi-closed (long stay) ward perceived significantly more social support (Table 3).

Intentions of nurses to use less coercive interventions with patients

The mean scores on the questions measuring the intentions of nurses to use less coercive interventions with patients and the perceived importance of using less coercive interventions (e.g. seclusion) are reported in Table 1. The male nurses in the present study showed a significantly greater intention to use less coercive interventions than the female nurses (Table 3). The regression results in Table 4 also show that a higher score regarding the perceived importance of using less coercive interventions with patients is a significant predictor of the intention to use less coercive interventions.

Discussion

Although mental health nurses are known to be confronted with aggression on a regular basis (Nijman *et al.* 1997, Rippon 2000, Jansen *et al.* 2005a), the majority of the nurses in the present study reported that in their perceptions, they are rarely or sometimes confronted with aggression. Remarkable is, that although nurses perceived never/rarely being confronted with aggression, the mean perceived number of incidents was 181 times a year. Has patient aggression become a part of the mental health nurse's daily practice and is it therefore not perceived as a major problem anymore? More research on nurses' coping strategies is needed to answer this question.

The nurses reported being mostly confronted with non-threatening verbal aggression followed by passive aggressive behaviour and least with sexual intimidation, suicide attempts and physical aggression. These results are similar to the results of Oud (2001). In his study, he used the POPAS and also found that nurses are mostly confronted with non-threatening verbal aggression and least with sexual intimidation, suicide attempts and physical aggression.

The attitude mental health nurses have towards patient aggression was mainly that they perceived this as destructive and offensive. The nurses rarely viewed patient aggression as serving a protective or communicative purpose while the nurses in an earlier study in the Netherlands by Jansen produced the highest ATAS scores for the view that patient aggression may serve a protective and communicative function (Jansen *et al.* 2006a). A possible explanation for this discrepancy could be that Jansen *et al.* conducted their study in 1995/1996 and that the attitudes of nurses may have

Table 3
Difference between groups and main variables (confrontation with aggression, attitude, social support, perceived behaviour control and intention), results of the independent *t*-test

$N = 85$	Experienced confrontations with aggression (POPAS) (1–5) M (SD)	Perceived importance of using less coercive interventions (1–5) M (SD)	Social support (1–5) M (SD)	Self-efficacy (PBC) (1–5) M (SD)	Intention to use less coercive interventions (1–5) M (SD)
Total mean ($n = 85$)	2.46 (0.76)	2.96 (0.81)	4.39 (0.50)	3.99 (0.58)	2.81 (0.83)
Female ($n = 58$)	2.44 (0.83)	2.81 (0.70)**	4.34 (0.52)	3.97 (0.46)	2.65 (0.76)**
Male ($n = 27$)	2.51 (0.74)	3.29 (0.94)	4.49 (0.46)	4.05 (0.55)	3.15 (0.88)
Mean age < 40 ($n = 50$)	2.57 (0.84)	2.97 (0.76)	4.31 (0.47)	3.84 (0.46)*	2.80 (0.77)
Mean age > 40 ($n = 35$)	2.32 (0.63)	2.94 (0.89)	4.50 (0.53)	4.21 (0.44)	2.82 (0.92)
Non bachelor educated ($n = 52$)	2.52 (0.74)	2.94 (0.88)	4.47 (0.50)	4.10 (0.45)**	2.82 (0.88)
Bachelor educated ($n = 33$)	2.36 (0.81)	2.99 (0.70)	4.26 (0.49)	3.84 (0.51)	2.79 (0.76)
Work experience < 12 years ($n = 45$)	2.50 (0.87)	2.92 (0.79)	4.28 (0.47)**	3.83 (0.49)*	2.75 (0.78)
Work experience > 12 years ($n = 40$)	2.44 (0.64)	2.99 (0.87)	4.52 (0.53)	4.19 (0.43)	2.86 (0.91)
Closed ($n = 42$)	2.36 (0.80)	2.99 (0.83)	4.54 (0.45)**	4.06 (0.48)	2.79 (0.82)
Semi-closed ($n = 43$)	2.34 (0.72)	2.94 (0.81)	4.28 (0.52)	3.95 (0.49)	2.82 (0.85)

PBC, perceived behaviour control; POPAS, Perceptions of the Prevalence of Aggression Scale.
*The mean score is significant at the <0.001 level (2-tailed).
**The mean score is significant at the <0.05 level (2-tailed).

changed considerably since then (e.g. as a result of a hardened society with an increasing incidence of aggression). Consideration of the exact reasons for this change in attitude goes beyond the scope of this study, but the discourse on the negative effects of coercive interventions today is illustrative (Beusekamp 2002). Coercive interventions, like seclusion, are more quickly applied when patients show extreme behaviour, which may include aggression (Schermer 2003). The view that patient aggression is mostly destructive and largely offensive may also negatively influence the patient–nurse relationship and lead to a particularly negative attitude towards patient aggression.

In general, the nurses we studied reported to manage the most common form of aggression, namely non-threatening verbal aggression, most adequately and the least common forms of aggression, namely suicide attempts and physical aggression, least adequately. Younger and less experienced nurses appeared to be more vulnerable to patient aggression. This result was also found in other studies (Needham *et al.* 2005, Nijman *et al.* 2005b). They experience more patient aggression and are less able to cope with patient aggression than older and more qualified nurses. Patricia Benner has developed a model to describe how student nurses and advanced beginners become more competent and develop into proficient nurses and in the end become experts as a result of learning and experience (Benner 1984). This is based on Dreyfus's model, which states that in the acquisition and development of a skill, a student passes through five levels of proficiency: novice, advanced beginner, competent, proficient and expert (Benner 2001). Older, well-educated nurses with relatively more nursing experience and greater self-efficacy when it comes to the management of patient aggression also show greater intention to use less coercive interventions with patients. Given their backgrounds and experience, it is suggested that these nurses are better able to recognize the signs of developing aggression than their colleagues, and thus, intervene more appropriately as well.

The scores for the intention to use less coercive interventions and judgements of the importance of using less coercive interventions were actually quite low. The low scores for an intention to use less coercive interventions with patients may reflect a so-called 'floor' effect. In three of the six wards involved in the present study, coercive interventions were rarely used, which means that the relevant nurses simply could not have an intention to use less coercive interventions. Similarly, the need to reduce the use of coercive interventions cannot be judged to be very important when coercive interventions are virtually not used in the first place.

The results cannot be generalized to other Dutch mental health institutions because of various organizational and possibly cultural differences between the different institu-

Table 4
Regression predictors for Intention to use less coercive interventions with patients, perceived confrontations with aggression and perceived confrontations with non-threatening verbal aggression

		Beta	*P*-value
a. Model with Intention as variable to be predicted[1]			
1	Gender	–0.285	0.008*
2	Perceived importance of using less coercive interventions	0.874	0.000**
b. Model with perceived confrontations with aggression as variable to be predicted[2]			
1	Age	–0.593	0.000**
	Nursing experience	0.349	0.017*
2	Age	–0.714	0.000**
	Nursing experience	0.348	0.013*
	Perceived behavioural control (self-efficacy)	0.316	0.005*
c. Model with non-threatening verbal aggression as variable to be predicted[3]			
1	Age	–0.221	0.040*
2	Age	–0.276	0.020*

[1]Dependent Variable: Intention.
[2]Dependent Variable: Confronted with aggression.
[3]Dependent Variable: Non-threatening verbal aggression.
*The mean score is significant at the 0.001 level.
**The mean score is significant at the 0.05 level.

tions. The results can nevertheless be used for the implementation of a local project aimed at the reduction of the prevalence of aggressive incidents and the use of coercive interventions with mental health patients during daily nursing practice. Repeated measurement at the end of such a project can clearly supply information on the effects of the project interventions on nurses' perceptions of the prevalence of patient aggression and their attitudes towards patient aggression.

The data collected in the present study are all self-report data. This means that the results are based on the self-reported histories of aggression for the different nurses and thus subject to possible recall bias and socially desirable responding. Given the small sample size and the use of mean substitution for missing data, the results should be interpreted with caution.

In order to reduce the use of coercive interventions among mental health patients, it is recommended that the predisposition of nurses to apply coercive interventions be targeted first. If nurses are made more aware of the extent to which they are confronted with aggression, of their use of coercive interventions and of the impact of coercive interventions on the patient–nurse relationship, the intentions of nurses to use coercive interventions may change. A training which focuses on improving communication skills, risk assessment and risk management can then be offered. And further research can be conducted to identify which environmental, organizational and cultural changes may also be needed.

Summary of findings

The present study with its descriptive character provides insight into mental health nurses' perceptions of the prevalence of patient aggression, their attitudes towards patient aggression and the possible determinants of using less coercive interventions with patients in a single mental health institution in the Netherlands. The nurses perceived being sometimes confronted with aggression, whereas the mean number of reported incidents indicated they are confronted with patient aggression once every other day. The attitude they have towards patient aggression mainly reflects the view that aggression is seen as an offensive and destructive behaviour of the patient. Overall, nurses feel competent in managing aggression and experience a lot of social support from their colleagues.

References

Ajzen I. (1991) The theory of planned behaviour. *Organization of Behavioural Human Decision Process* **50**, 179–211.

Ajzen I. & Fishbein M. (1980) Chapter 5; determinants of behaviour intentions, chapter 6, determinants of the attitudinal and normative components. *Understanding and Predicting Social Behaviour*, 53–72.

Altman D.G. (1991) *Practical Statistics for Medical Research*. Chapman & Hall/CRC, London.

Beck J.C., White K.A. & Gabe B. (1991) Emergency psychiatric assessment of violence. *American Journal of Psychiatry* **148**, 1562–1564.

Benner P. (1984) *From Novice to Expert: Excellence and Power in Clinical Nursing Practice*. Addison–Wesley Company, Menlo Park, CA.

Benner P. (2001) *From Novice to Expert: Excellence and Power in Clinical Nursing Practice*, commemorative edition. Prentice Hall, Upper Saddle River, NJ.

Beusekamp W. (2002) Nog een deken, of een boterham? *De Volkskrant*, 14 December 2002.

Bouras N., Trauter T. & Watson J.P. (1982) Ward environment and disturbing behaviour. *Psychological Medicine* **12**, 309–319.

Bowers L., Whittington R., Almik R., *et al*. (1999) A European perspective on psychiatric nursing and violent incidents, management, education and service organisation. *International Journal of Nursing Studies* **36**, 217–222.

Irwin A. (2006) The nurse's role in the management of aggression. *Journal of Psychiatric and Mental Health Nursing* **13**, 309–318.

Jansen G.J., Dassen T.W. & Moorer P. (1997) The perception of aggression. *Scandinavian Journal of Caring Sciences* **11**, 51–55.

Jansen G.J., Dassen T.W. & Groot Jebbink G. (2005a) Staff attitudes towards aggression in health care: a review of the literature. *Journal of Psychiatric and Mental Nursing* **12**, 3–13.

Jansen G.J., Middel B. & Dassen T.W. (2005b) An international comparative study on the reliability and validity of the attitudes towards aggression scale. *International Journal of Nursing Studies* **42**, 467–477.

Jansen G.J., Dassen T.W., Burgerhof J., *et al*. (2006a) Psychiatric nurses' attitude towards inpatient aggression: preliminary report of the development of attitude towards aggression scale (ATAS). *Aggressive Behaviour* **32**, 44–53.

Jansen G.J., Middel B., Dassen T.W., *et al*. (2006b) Cross-cultural differences in psychiatric nurses: attitude to inpatient aggression. *Archives of Psychiatric Nursing* **20**, 82–93.

Janssen W., Hutschemaekers G. & Lendemeijer B. (2005) Dwang en drang in de psychiatrie: Kwaliteit van vrijheidsbeperkende interventies. *Dwang cijfermatig in beeld*, 67–76.

Kok H.T. & Berghout K. (2002) *Separatie en Afzondering. Cahier Emergency Psychiatry*. Available at: http://www.emergenpsy.nl/INTACTA02.htm (accessed 27 December 2007).

Lanza M.L. (1985) How nurses react to patient assault. *Journal of Psychosocial Nursing* **23**, 6–11.

Needham I., Abderhalden C., Zeller A., *et al*. (2005) The effect of a training course on nursing students' attitudes toward, perceptions of and confidence in managing patient aggression. *Journal of Nursing Education* **44**, 415–420.

Nijman H.L.I. & Rector G. (1999) Crowding and aggression on inpatient wards. *Psychiatric Services* **50**, 830–831.

Nijman H.L.I., Allertz W.W.F., Merckelbach H., *et al*. (1997) Aggressive behaviour on an acute psychiatric admission ward. *European Journal of Psychiatry* **11**, 106–114.

Nijman H.L.I., Bowers L., Oud N., *et al*. (2005a) Psychiatric nurses' experience with inpatient aggression. *Aggressive Behavior* **31**, 217–227.

Nijman H.L.I., Palmstierna T., Almvik R., *et al*. (2005b) Fifteen years of research with the Staff Observation Aggression Scale: a review. *Acta Psychiatrica Scandinavica* **111**, 12–21.

Oster A., Bernbaum S. & Patten S. (2001) Determinants of violence in the psychiatric emergency service. *Canadian Medical Association Journal* **164**, 32–33.

Oud N. (2001) Internal report. *POPAS Ervaringen van psychiatrische hulpverleners met agressief gedrag*, 1–15.

Peerdeman P. (2006) *Project Veiligezorg*. Available at: http://www.agressieindezorg.nl/view.cfm?page_id=2950 (accessed 6 March 2007).

Rippon T.J. (2000) Aggression and violence in health care professions. *Journal of Advanced Nursing* **31**, 452–460.

Schanda H. & Taylor P. (2001) Inpatient violence: frequency, risk factors, preventive strategies. *Fortschr Neurol Psychiatr* **69**, 443–452.

Schermer M.H.N. (2003) Drang en informele dwang in de zorg. *Hoofdstuk 3 uit het rapport Signalering Ethiek en Gezondheid*, 3. Available at: http://www.ceg.nl/data/download/hfdst.3_drang_en_informele_dwang_Schermer_pdf (accessed 27 December 2007).

Sheridan M., Henrion R., Robinson L., *et al*. (1990) Precipitants of violence in a psychiatric inpatient setting. *H&CP* **41**, 776–780.

Victorian Department of Human Services (2006) *Mechanical Restraint, Cief Psychiatrist's Guideline*. Available at: http://www.health.vic.gov.au/mentalhealth/cpg/restraint.htm (accessed 22 November 2007).

Whittington R. & Higgins L. (2002) More than zero tolerance? Burnout and tolerance for patient aggression amongst mental health nurses in China and the UK. *Acta Psychiatrica Scandinavica* **106**, 37–40.