INTERNATIONAL JOURNAL of NURSING PRACTICE

*International Journal of Nursing Practice* 2011; **17**: 495–501

**RESEARCH PAPER**

# *Perception of patient aggression among nurses working in a university hospital in Turkey*

**Ozan Pazvantoğlu MD**
*Assistant Professor, Department of Psychiatry, Ondokuz Mayis University, School of Medicine, Samsun, Turkey*

**Kübra Gümüş RA BSN**
*Research Assistant, Ondokuz Mayis University, Health Services Vocational School, Samsun, Turkey*

**Ömer Böke MD**
*Associate Professor, Department of Psychiatry, Ondokuz Mayis University, School of Medicine, Samsun, Turkey*

**İlknur Yıldız RN BSN**
*Clinical Nurse, Department of Psychiatry, Ondokuz Mayis University, School of Medicine, Samsun, Turkey*

**Ahmet Rıfat Şahin MD**
*Professor, Department of Psychiatry, Ondokuz Mayis University, School of Medicine, Samsun, Turkey*

*Accepted for publication May 2011*

Pazvantoğlu O, Gümüş K, Böke Ö, Yıldız İ, Şahin AR. *International Journal of Nursing Practice* 2011; **17**: 495–501
**Perception of patient aggression among nurses working in a university hospital in Turkey**

The way patient aggression is perceived influences nurses' attitudes and behaviour towards patients. The aim of this cross-sectional, descriptive study was to investigate how nurses working in a university hospital perceive aggression and whether certain variables (sociodemographic and professional characteristics, exposure to aggressive behaviour) affect that perception. Two hundred and eighteen nurses (response rate 68.1%) from different departments were administered the Perception of Aggression Scale, a self-reported scale measuring perception of patient aggression towards nurses. The nurses in this study generally perceived patient aggression as dysfunctional. Nurses exposed to patient aggression in their professional lives regarded patient aggression more as dysfunctional. In addition, the oldest nurses, the most professionally experienced and those with the longest tenure in their departments had less perception of aggression as functional than others. Professional fatigue and burn-out might play a role in this.

**Key words:** nursing, occupational violence, perception of aggression.

*Correspondence: Ozan Pazvantoğlu, Ondokuz Mayıs Üniversitesi Hastanesi, Psikiyatri Polikliniği, 55139, Kurupelit, Samsun, Turkey. Email: ozanpazvantoglu@gmail.com*

This study was accepted to be presented as a poster presentation in the 7th European Congress on Violence in Clinical Psychiatry, Prague, Czech Republic, 19–22 October 2011.

doi:10.1111/j.1440-172X.2011.01967.x © 2011 Blackwell Publishing Asia Pty Ltd

## INTRODUCTION

Aggression and violence in health institutions has been described as 'any incident which puts a health care worker at risk and includes verbal abuse, threatening behavior or assault by a patient or member of the public'.[1] The health field has been reported to represent a greater risk in terms of exposure to such behaviour than other spheres.[2] Studies have repeatedly reported that emergency and psychiatric department staff in terms of departments, and nurses in terms of occupation, are relatively more frequently the targets of such behaviour.[3,4] The main reason for this is that nurses are the first health personnel to come into contact with patients and are in constant proximity to them.[5] Nurses' exposure to violence and aggressive behaviour varies in general hospitals, but is usually high (49–91%).[4,6,7] Similar results have emerged from studies in Turkey.[5,8,9]

Aggressive behaviour and violence towards nurses is regarded as the product of interactions of more than one factor. These are patient-related factors (such as psychopathology and gender), environmental factors (departmental conditions, waiting times, etc.) and staff-related factors (professional training and experience, age, attitude, etc.). Of these, nurse attitude has been suggested to have an important effect in the management of violent behaviour.[10] The main factor establishing that attitude is the form of perception of such behaviour.[11] Patient aggression has been shown in the literature to be perceived as loaded with more negative emotions and opinions. Emotional reactions such as disappointment, anger, hurt and fear,[12] despondency,[13] unease, sleeplessness, flashbacks and depression[14] and continued stress[15] and behavioural responses such as decreased performance, poor work attendance, relocation and resignation from work[16] have all been reported. On the other hand, divisions among nurses regarding perception of aggressive behaviour severity have also been suggested.[17] Some studies have shown that nurses can behave empathetically towards aggressive behaviour,[18] that there is also a functional aspect to this behaviour and that they might not only perceive it as an undesirable situation needing to be prevented.[11] Several studies have evaluated nurses working in psychiatric units and student nurses by means of Perception of Aggression Scale (POAS).[11,19,20] These studies have shown that, in addition to being regarded as 'harmful, aggressive behaviour', patient aggression might also be considered 'normal or acceptable behaviour'. Contrary to expectations, a low negative correlation has been determined between these two dimensions.[11] In terms of factors associated with aggression perception among nurses, two studies reported that dysfunctional perception of aggression is correlated with length of service in the profession and that functional perception is correlated with youth. The same studies also investigated the effects of exposure to aggressive behaviour and violence in private and professional lives and the frequency of such exposure on perception of patient aggression, but established no correlation.[11,19]

The fact that the concept of perception is abstract and subjective necessitates measurement using psychometric means in studies. To the best of our knowledge, however, there have been no studies investigating perceptions of aggression from patients among nurses working in a general hospital using objective measurements. Our study was intended to investigate perceptions of aggression among nurses working in a university hospital and the effects of various individual and professional characteristics on that perception.

## METHOD

### Sampling

Nurses ($n = 563$) working at the Ondokuz Mayis University Medical Faculty (Samsun, Turkey) were chosen. Contact was made with 320 (56.8%) of these and 218 sets of valid data were collected. Response rate was 68.1%. All the nurses enrolled in the study worked at least 40 h a week and all were female. Approval and permission for the sampling group to be administered forms and scales was obtained from the hospital management.

### Study design and procedure

This was a cross-sectional, descriptive observational study. A data form designed by the authors and a self-reporting measure evaluating aggression perception were distributed to all nurses agreeing to participate. All forms were completed and returned within ≈1 month. Participant data are shown in Table 1.

### Definition of violence and aggressive behaviour

Verbal (including shouting, insults, threats and swearing) or physical (hitting, pushing, kicking, etc.) behaviour to which nurses are exposed in their professional (from patients) and private/social lives (from relatives, spouses, etc.) are defined as violence and aggressive behaviour.

© 2011 Blackwell Publishing Asia Pty Ltd

**Table 1** Sociodemographic characteristics of nurse and theirs exposure to aggression ($n = 218$)

| Variables | N | % |
|---|---|---|
| Age (years) | | |
| ≤ 25 | 42 | 19.3 |
| 26–30 | 65 | 29.8 |
| 31–35 | 57 | 26.1 |
| ≥ 36 | 54 | 24.8 |
| Marital status | | |
| Married | 143 | 65.6 |
| Single | 73 | 33.5 |
| Divorced | 2 | 0.9 |
| Level of education | | |
| High school or diploma | 17 | 7.8 |
| Degree or above | 201 | 92.2 |
| Department | | |
| Internal | 92 | 42.2 |
| Surgical | 55 | 25.2 |
| Emergency | 20 | 9.2 |
| Intensive care | 36 | 16.5 |
| Other | 15 | 6.9 |
| Total length of employment (years) | | |
| < 5 | 92 | 42.2 |
| 5–10 | 53 | 24.3 |
| > 10 | 73 | 33.5 |
| Number of years working in current department | | |
| < 3 | 104 | 47.7 |
| 3–6 | 51 | 23.4 |
| > 6 | 63 | 28.9 |
| Occupational verbal violence | | |
| Yes | 141 | 64.6 |
| Occupational physical violence | | |
| Yes | 24 | 11.1 |
| Occupational verbal or physical violence | | |
| Yes | 151 | 69.2 |
| Non-occupational verbal or physical violence | | |
| Yes | 138 | 63.3 |

Those encountering such behaviour at least once in their lives were classified as 'subjected to aggressive behaviour and violence'.

## Tools

### *Data form*

The data form was designed by the authors, capable of being completed in an average of 5 min and investigating certain participant sociodemographic (age, marital status, education level, etc.) and professional (department, years in service, years worked in current department, etc.) characteristics and exposure to aggressive behaviour (occupational and non-occupational).

### *Perception of Aggression Scale (POAS)*

The original of this scale, used for the purpose of evaluating perception of patient aggression by nurses, was developed by Jansen *et al*.[21] Bilgin *et al*. investigated the validity and reliability of the Turkish version of the scale.[22] Each item of this self-reported scale involving different statements regarding aggression has two subcomponents. The functional component consists of items investigating a perception of aggression as 'functional or understandable/acceptable' (such as 'aggression is a sort of expression of emotion, such as laughing or crying'). The dysfunctional component evaluates the 'non-functional or unacceptable/undesirable' dimension of aggression (such as 'it means inflicting psychological or physical pain on others'). Each item has five possible responses scored as follows: 'strongly agree' (1), 'agree' (2), 'not sure' (3), 'disagree' (4) or 'strongly disagree' (5). Total scores for the items in the subscales are divided by the number of items for a total subscale score. Low scores express the height of the power of that subscale (a *lower* functional subscale score expresses a *greater* perception of aggression as 'functional/acceptable', whereas a *lower* dysfunctional subscale score expresses a *greater* perception of aggression as 'non-functional/unacceptable').

## Statistical analysis

Mean ± standard deviation (SD) and percentages were used in describing nurses' characteristics and in calculating POAS subscores. Scores were analysed using the Kolmogorov–Smirnov test and were normally distributed. For that reason, Student's *t*-test and one-way ANOVA (with post-hoc Tukey test) were used to compare groups POAS subscores on the basis of group numbers. Significance was set at $P < 0.05$ for all analyses.

# RESULTS

## Various nurse sociodemographic/ professional characteristics and exposure to aggressive behaviour from patients

Mean age was 30.64 (SD 5.84, median 30, range 29), mean total employment was 8.83 years (SD 6.92, median 7, range 29.5) and mean time of service in the current

© 2011 Blackwell Publishing Asia Pty Ltd

**Table 2** Nurses' Perception of Aggression Scale subscale scores

| Subscales | N | Mean ± SD | Minimum | Maximum |
|---|---|---|---|---|
| Functional subscore | 218 | 3.39 ± 0.61 | 1.58 | 5.00 |
| Dysfunctional subscore | 218 | 2.28 ± 0.56 | 1.06 | 4.60 |

department was 4.52 years (SD 4.64, median 3, range 26.9). These lengths were categorized for comparison at analysis (Table 1). The majority of participants were married (65.6%) and 92.2% had degrees or above. The largest number of nurses responding came from internal diseases departments (42.2%). Of the nurses, 64.6% reported exposure to verbal violence in their professional lives, 11.1% to physical violence and 69.2% had been exposed to physical or verbal violence at least once. In addition, 63.3% had been exposed to verbal or physical violence in their non-occupational lives.

## Nurses' perception of patient aggression

Perception of Aggression Scale subscale scores for the nurses participating in the study are presented in Table 2. Nurses' mean dysfunctional perception of aggression was lower than mean functional perception. The nurses in our study perceived patient aggression more as dysfunctional. A significant negative correlation was determined between the two dimensions. However, the correlation was weak (−0.201, $P = 0.003$).

## Correlation between various sociodemographic characteristics and perception of patient aggression

No correlation was determined between marital status, education level or department the nurses worked in and perception of patient aggression ($P > 0.05$). In contrast, age, years in the profession and years of working in nurses' present departments all influenced this perception. Analysis of all values showed that functional subscores increased with rising age and duration of employment (patient aggression was perceived as less functional), whereas dysfunctional subscores decreased (patient aggression was perceived as more dysfunctional). In terms of age, the oldest age group perceived aggression as less functional than all other groups. In addition, functional perception was lower in the 31–35 age group than the youngest age group. The most experienced nurses, with > 10 years of service, had significantly less perception of aggression as functional than the other groups, although there was no difference in this subscore between the other two groups. On the other hand, this group constituted by the most experienced nurses had significantly greater dysfunctional perception of patient aggression than the shortest service group. Finally, in terms of years of working in their current departments, the group made up of nurses with the greatest length of service in their present departments also perceived patient aggression less as functional than nurses with the shortest service (Table 3).

## Correlation between nurses' exposure to occupational and non-occupational violence and perception of patient aggression

Our results established no significant correlation between lack of exposure to violence in the *non-professional lives* of the nurses participating in the study and their perception of patient aggression. On the other hand, significant correlation was determined between those not exposed to violence *in professional life* and perception of aggression as functional. In contrast, those exposed to violent behaviour in their professional lives perceived aggression as more dysfunctional than those with no such exposure. This difference was more correlated with exposure to verbal than to physical violence (Table 4).

# DISCUSSION

This study involved a psychometric evaluation of perception of aggressive patient behaviour on the part of nurses working in a university hospital in Turkey and investigated how various factors (sociodemographic and occupational characteristics, exposure to violence in professional and non-professional life) affect that perception.

Our findings show a greater level of dysfunctional perception of patient aggression among the participants. The majority of previous studies on the subject evaluated nurses' perceptions regarding patient aggression *subjectively* and this perception was loaded with negative emotions and opinions (anger, regret, disappointment, etc.) similar to our findings.[12–16] Two studies evaluating this perception using the same psychometric tool as us (POAS) reported that nurses perceive patient aggression as more dysfunctional.[11,20] These findings are in

© 2011 Blackwell Publishing Asia Pty Ltd

**Table 3** Correlation between age, total years of service and length of service in current department and Perception of Aggression Scale (POAS) subscores

| Variables | N (%) | Fs | *F* (p) & post-hoc | DFs | *F* (p) & post-hoc |
|---|---|---|---|---|---|
| Age (years) | | | | | |
| ≤ 25 (a) | 42 (19.3) | 3.08 ± 0.64 | 12.035** | 2.40 ± 0.60 | 1.317(NS) |
| 26–30 (b) | 65 (29.8) | 3.29 ± 0.53 | a = b,b = c | 2.32 ± 0.55 | |
| 31–35 (c) | 57 (26.1) | 3.38 ± 0.60 | a < c | 2.23 ± 0.49 | |
| > 35 (d) | 54 (24.8) | 3.76 ± 0.61 | a, b,c < d | 2.19 ± 0.62 | |
| Years of service | | | | | |
| < 5 (a) | 92 (42.2) | 3.22 ± 0.61 | 11 858** | 2.39 ± 0.58 | 3.514* |
| 5–10 (b) | 53 (24.3) | 3.31 ± 0.57 | a = b < c | 2.23 ± 0.42 | a = b,b = c |
| > 10 (c) | 73 (33.5) | 3.66 ± 0.66 | | 2.17 ± 0.62 | a > c |
| Years of service in current department | | | | | |
| < 3 (a) | 104 (47.7) | 3.30 ± 0.64 | 3722* | 2.34 ± 0.59 | 1.425(NS) |
| 3–6 (b) | 51 (23.4) | 3.36 ± 0.46 | a = b,b = c | 2.27 ± 0.54 | |
| > 6 (c) | 63 (28.9) | 3.56 ± 0.65 | a < c | 2.19 ± 0.54 | |

* $P < 0.05$; ** $P < 0.001$. DFs, POAS dysfunctional subscore; Fs, POAS functional subscore; NS, not significant.

**Table 4** Correlation between exposure to professional and non-professional violent and aggressive behaviour and Perception of Aggression Scale (POAS) subscores

| Violence type | Fs | *T* | DFs | *T* |
|---|---|---|---|---|
| Occupational violence | | | | |
| Yes (*n* = 151) | 3.37 ± 0.62 | 0.798 | 2.22 ± 0.53 | −2.152* |
| No (*n* = 67) | 3.44 ± 0.60 | | 2.39 ± 0.62 | |
| Non-occupational violence | | | | |
| Yes (*n* = 138) | 3.39 ± 0.64 | 0.115 | 2.28 ± 0.56 | 0.112 |
| No (*n* = 80) | 3.40 ± 0.59 | | 2.28 ± 0.57 | |

* $P < 0.05$. DFs, POAS dysfunctional subscore; Fs, POAS functional subscore.

agreement with our own. In contrast to earlier studies, our participants did not consist solely of nurses working in psychiatric units. On the other hand, we determined a significant negative correlation between functional and dysfunctional subscores. This correlation was weak, however. In fact, a stronger correlation might have been anticipated. For example, those perceiving aggression as more dysfunctional might also have been expected to perceive it as less functional. This unexpected result suggests that perception of aggression might have a more complex structure and that various concrete factors are probably more involved in determining perception of every incident of aggression. At the same time, it might also suggest that very different dimensions are involved in aggression being perceived as functional or dysfunctional.

In terms of sociodemographic and professional characteristics, no significant difference was determined among nurses' education levels, marital status and department of service with regard to aggression perception. On the other hand, according to our categorizations, nurses with the highest ages, most years in the profession and most years in the same department perceived aggression as less functional than others. In addition, those with the greatest total numbers of years in the profession possessed greater

© 2011 Blackwell Publishing Asia Pty Ltd

dysfunctional perception of aggression than others. These results are in agreement with those of Abderhalden *et al*. who reported that more experienced and older nurses had a higher perception of aggression as dysfunctional.[11] In fact, these time-related variables (age, total years in service and years in current department) are directly or indirectly correlated with each other. Their showing a similar pattern in terms of perception of aggression might be regarded as expected and at the same time a situation enhancing the reliability of the correlation. As nurses' ages and years spent in the profession or present department increase, various positive characteristics might be expected (such as greater competence in overcoming patient-related difficulties and recognizing preliminary signs of aggressive behaviour).[23] In contrast, negativities created by the same processes might also lead to occupational exhaustion, fatigue and burn-out. In our study, the oldest and most experienced nurses regarded aggression significantly as less functional and as more dysfunctional than younger and less experienced participants, and this might be interpreted as these negative factors having a greater impact on nurses than positive ones.

Finally, a significant part of the nurses in this study (69.2%) had been exposed to aggressive behaviour and violence from patients at least once in their lives. These nurses had a greater dysfunctional perception of aggression than those with no such experience. This finding conflicts with two earlier studies that determined no difference.[11,19] Our positive finding suggests that nurses exposed to aggressive behaviour from patients in the past might be more uneasy and prejudiced on the subject as they see the harmful effects of violence personally reflected in their own bodies and minds, and that this might have a negative influence on perceptions of aggression. The authors of one earlier study stated that exposure to occupational violence might predispose towards dysfunctional perception of aggression.[11] On the other hand, our results, similar to those of a previous study, show that exposure to violence in their private lives does not affect perceptions of aggression.[11] Our results can be commented as exposure to aggression in one area (occupation, marital, social, etc.) affects perception of aggression in that area but not in others.

Nurses' perceptions of patient aggression are generally negative. Increasing age and time spent in the profession and exposure to patient aggression in professional life further increase this negative perception. On the other hand, perception of aggression might also be affected by cultural factors, working conditions, the patient profile and professional training (particularly regarding management of aggressive behaviour). These factors should be borne in mind in evaluating our results. In conclusion, increasing nurses' levels of knowledge regarding the concept of patient aggression in pre-professional and inter-professional seminars might enable them to raise their perceptions of patient aggression to a more positive level.

## ACKNOWLEDGEMENTS

We thank all nurses in Ondokuz Mayis University, School of Medicine, Samsun, Turkey, who participated to this study.

## REFERENCES

1 Saines JC. Violence and aggression in A&E: Recommendations for action. *Accident and Emergency Nursing* 1999; **7**: 8–12.
2 Elliot PP. Violence in health care. What nurse managers need to know. *Nurse Management* 1997; **28**: 38–41.
3 Home Office. *Violence at Work: Findings from the British Crime Survey*. London: Home Office Research, Development and Statistics Directorate, 1999.
4 Wells J, Bowers L. How prevalent is violence towards nurses working in general hospitals in the UK? *Journal of Advanced Nursing* 2002; **39**: 230–240.
5 Ayrancı Ü, Yenilmez Ç, Günay Y, Kaptanoğlu C. Çeşitli sağlık kurumlarında ve sağlık meslek gruplarında şiddete uğrama sıklığı. *Anadolu Psikiyatri Dergisi* 2002; **3**: 147–154.
6 Tallahassee F. The extent, nature, and precipitating factors of nurse assault among three groups of registered nurses in a regional medical center. *Journal of Emergency Nursing* 2002; **28**: 11–17.
7 Zampieron A, Galeazzo M, Turra S, Buja A. Perceived aggression towards nurses: Study in two Italian health institutions. *Journal of Clinical Nursing* 2010; **19**: 2329–2341.
8 Çelik S, Çelik Y, Ağırbaş İ, Uğurluoğlu Ö. Verbal and physical abuse against nurses in Turkey. *International Nursing Review* 2007; **54**: 359–366.
9 Kısa S. Turkish nurses' experiences of verbal abuse at work. *Archives of Psychiatric Nursing* 2008; **22**: 200–207.
10 Jansen G, Middel B, Dassen TWN, Reijneveld MSA. Cross-cultural differences in psychiatric nurses' attitudes to inpatient aggression. *Archives of Psychiatric Nursing* 2006; **20**: 82–93.
11 Abderhalden C, Needham I, Friedli TK, Poelmans J, Dasses T. Perception of aggression among psychiatric nurses in Switzerland. *Acta Psychiatrica Scandinavica* 2002; **106** (Suppl. 412): 110–117.
12 O'Connell B, Young J, Brooks J, Hutchings J, Lofthouse J. Nurses' perceptions of the nature and frequency of

© 2011 Blackwell Publishing Asia Pty Ltd

aggression in general ward settings and high dependency areas. *Journal of Clinical Nursing* 2000; **9**: 602–610.

13 Uzun O. Perceptions and experiences of nurses in Turkey about verbal abuse in clinical settings. *Journal of Nursing Scholarship* 2003; **35**: 81–85.

14 Atawneh FA, Zahid MA, Al-Sahlawi KS, Shahid AA, Al-Farrah MH. Violence against nurses in hospitals: Prevalence and effects. *British Journal of Nursing* 2003; **12**: 102–107.

15 McKenna BG, Suzette JP, Naumai AS, Coverdale JH, Gale CK. A survey of threats and violent behaviour by patients against registered nurses in their first year of practice. *International Journal of Mental Health Nursing* 2003; **12**: 56–63.

16 Fernandes CMB, Bouthillette F, Raboud JM *et al*. Violence in the emergency department: A survey of health care workers. *Canadian Medical Association Journal* 1999; **16**: 161–168.

17 Morrison EF. A comparison of perceptions of aggression and violence by psychiatric nurses. *International Journal of Nursing Studies* 1993; **30**: 261–268.

18 Farrell GA. Aggression in clinical settings: Nurses' views—A follow-up study. *Journal of Advanced Nursing* 1999; **29**: 532–541.

19 Palmstierna T, Barredal E. Evaluation of the Perception of Aggression Scale (POAS) in Swedish nurses. *Nordic Journal of Psychiatry* 2006; **6**: 447–451.

20 Muro C, Tomas C, Moreno L, Rubio V. Perception of aggression, personality disorders and psychiatric morbidity in nursing students. *Acta Psychiatrica Scandinavica* 2002; **106**: 118–120.

21 Jansen GJ, Dassen WN, Moorer P. The perception of aggression. *Scandinavian Journal of Caring Sciences* 1997; **11**: 51–55.

22 Bilgin H, Tulek Z, Ozcan N. Validation of the Turkish version of the perception of aggression scale (POAS). *Proceedings of the 6th European Congress on Violence in Clinical Psychiatry*, poster presentation, 2009, 99–105.

23 Jonker EJ, Goossens JJ, Steenhuis IHM, Oud NE. Patient aggression in clinical psychiatry: Perceptions of mental health nurses. *Journal of Psychiatric and Mental Health Nursing* 2008; **15**: 492–499.

© 2011 Blackwell Publishing Asia Pty Ltd