

# Exposure the doctors to aggression in the workplace

*Jankowiak B, Kowalczyk K\*, Krajewska-Kulak E, Sierakowska M, Lewko J, Klimaszewska K*

Department of General Nursing, Medical University of Białystok, Poland

## Abstract

**Purpose:** To evaluate the frequency, source and type of aggression towards doctors, depending on their place of work and position.

**Material and methods:** The study was conducted among 501 doctors from the area of Podlaskie Province. To evaluate the level and type of aggression towards doctors in their workplace we used a questionnaire prepared for the needs of this study by modifying the questionnaire "The frequency and consequences of exposing nurses to workplace aggression", which had been drafted by the Institute of Labour Medicine in Łódź. The results were analysed with the application of the chi-square and the Kruskal-Wallis tests.

**Results:** The most common form of aggression was voice raising, which happened to 80% of doctors employed in inpatient medical centres and 91% doctors from outpatient centres. More than a half of the subjects have heard threats from their patients. Verbal aggression from doctors' superiors happened most often in surgery wards (48%), neurology wards (40%), admission rooms (33%). The causes of aggression most often quoted by doctors include: staff shortages (9%), stress – tiredness (9%).

**Conclusions:** Workplace aggression towards doctors may be inflicted both by patients and colleagues. The aggression in the medical environment can take on different forms and create a threat in the workplace. Doctors working in hospital wards (psychiatry, surgery, neurology) are the ones who are the most exposed to aggression.

**Key words:** aggression, stress, mobbing, doctor.

## Introduction

The interest in workplace aggression and violence, which appeared during the last few years, is connected with the changing view on the factors conditioning the proper functioning of people in their professional and social life. These phenomena are inherent elements of human interactions, which are observed in all situations connected with the necessity of entering into relations with other people [1].

Workplace violence may take on different forms, starting from the mildest, such as: shouting, verbal abuse, intimidation, threats, blackmail, hostile behaviours, mobbing, bullying, sexual harassment and finishing with physical attacks in the form of assaults and maltreatment. Aggression may come from the outside, when it is inflicted by strangers (patients and their families) or from the inside of the institution (colleagues, superiors or subordinates). While the aggression coming from the outside is noticed and monitored, the aggression inflicted by co-workers is often ignored and treated as taboo [2].

The consequences of exposure to aggression, which are directly felt by the employee are: irritation, fear, discouragement, low spirits. The characteristic consequence of long-term violence is the lowering of one's self-esteem and feeling responsible for the existing situation [3]. Aggression victims may feel somatic ailments and long-term, recurrent acts of workplace violence may also lead to psychic disorders [4].

The objective of the study was to evaluate the frequency, source and type of aggression towards doctors, depending on their place of work and position.

\* CORRESPONDING AUTHOR:  
Zakład Pielęgniarstwa Ogólnego  
Akademia Medyczna w Białymstoku  
15-095 Białystok, ul. M. Skłodowskiej-Curie 7A, Poland  
Tel: +48 85 7485528  
e-mail: kkowalczyk@op.pl (Krystyna Kowalczyk)

**Table 1. Forms of patient-inflicted aggression in outpatient and inpatient health care centres**

The form of patient-inflicted aggression	Inpatient		Outpatient		$P_{\text{chi-square}}$	$P_{\text{K-W}}$
	%	$\bar{x}$	%	$\bar{x}$		
Raised voice	80%	2.96	91%	2.80	0.0069**	0.1567
Used threats	61%	2.59	62%	2.33	0.8591	0.0281*
Hitting attempts	24%	2.57	10%	2.10	0.0022**	0.2321
Assault, hitting	11%	2.61	1%	2.00	0.0015**	0.5519

$\bar{x}$  – point average (aggression intensity);  $p_{\text{K-W}}$  – the result of Kruskal-Wallis test shows how much the difference in intensity of contacts with a given form is the question of workplace specificity; if  $p < 0.05$  we deal with statistical significance (\*); if  $p < 0.01$  – there is a strong statistical significance (\*\*), when  $p < 0.001$  it is a very strong statistical dependence (\*\*\*)

**Table 2. Patient-inflicted aggression according to the type of workplace**

The form of patient-inflicted aggression	Departments <sup>*)</sup>								$P_{\text{chi-square}}$
	1	2	3	4	5	6	7	8	
raised voice	89%	75%	86%	79%	88%	85%	54%	92%	0.0000***
used threats	77%	46%	71%	61%	67%	63%	43%	61%	0.0019**
blackmailed	54%	14%	45%	29%	41%	30%	26%	32%	0.0002***
hitting attempts	34%	10%	34%	20%	29%	27%	11%	9%	0.0000***
were hostile	55%	41%	67%	54%	50%	52%	28%	56%	0.0027**
vulgar (in front of colleagues)	70%	46%	78%	64%	67%	48%	31%	50%	0.0000***
vulgar (in front of patients)	71%	44%	67%	59%	64%	50%	24%	46%	0.0000***
assault, hitting	23%	3%	14%	9%	12%	13%	2%	1%	0.0001***

\*) 1 – psychiatry; 2 – paediatrics; 3 – admission rooms; 4 – neurology; 5 – surgery; 6 – internal medicine; 7 – obstetrics and gynaecology; 8 – family medicine

## Material and methods

The study was conducted among 501 doctors from the area of Podlaskie Province. To evaluate the level and type of aggression towards doctors in their workplace we used a questionnaire prepared for the needs of this study by modifying the questionnaire “The frequency and consequences of exposing nurses to workplace aggression”, which had been drafted by the Institute of Labour Medicine in Łódź. The relationship between the frequency of contacts and the given form of aggression, depending on the place of work, was analysed by means of the chi-square test. The Kruskal-Wallis test was used to measure the level of dependence between the intensity of aggression and quality variables (e.g. place of work, ward).

## Results

The analysis covered the questionnaires filled in by 501 doctors employed in outpatient and inpatient medical centres on the territory of Podlaskie Province. The majority of the respondents were women (56.7%) and married people (71%). The average age was 39 years, and the average seniority – 14 years. 50% of subjects worked as junior doctors, 13% had managerial positions. Almost every second doctor had a medical specialization, 21% of them had a specialization in internal medicine and 20% in surgery. The vast majority of doctors were employed in inpatient health care (80%), and three out of ten doctors worked in

two places, but the outpatient health care was always the second workplace.

Patient-inflicted aggression affected both the doctors working in inpatient and outpatient health care. The most common form of verbal aggression was voice raising ( $p=0.0069$ ), which affected 80% of respondents working in inpatient medical centres and 91% of doctors from outpatient centres. A quarter of doctors have come across blackmail attempts and over 30% of doctors have encountered patients behaving in a hostile way. Such situations occurred at least several times a year.

More than a half of the subjects (61%) working in inpatient health care and 62% from outpatient health care have received threats from patients. It is worrying that 11% of doctors working in inpatient health care have also experienced physical aggression such as an assault and hitting (Tab. 1).

The frequency of different forms of patient-inflicted aggression was significantly dependent on the type of the ward. The most “threatened” wards are the psychiatry and admission rooms while the least – obstetrics and gynaecology (Tab. 2).

The analysis also covered the frequency and the forms of aggression inflicted by doctors’ superiors. The most common form was the voice raising, which is the behaviour encountered by a relatively large part of respondents. Verbal aggression from the superiors happened much more often in inpatient medical centres: 33% of doctors have being addressed by the superior with a raised voice, 16% of subjects reported a vulgar behaviour of their superior in front of other co-workers, and 11% – in front of patients. The doctors working in outpatient health care

also described the forms of aggression presented by their bosses in the following way: raised voice – 17%, vulgar in front of co-workers – 6%, vulgar in front of patients – 3%.

The results of the chi-square test have confirmed the statistical relationship for superiors using the raised voice towards doctors ( $p=0.0012$ ) and being vulgar towards doctors in front of other co-workers ( $p=0.0094$ ). Most often, verbal aggression (raised voice) from superiors happened in the surgery ward (48%), the neurology ward (40%) and in admission rooms (33%).

The co-operating doctors quite often created situations when they used verbal aggression towards each other. Such situations occurred more often in inpatient medical centres. 12% (inpatient health care) and 5% (outpatient health care) of subjects reported threatening situations connected with fellow doctors. Good manners of doctors towards one another is a phenomenon which is worth thinking about since 17% (inpatient health care) and 7% (outpatient health care) reported vulgar behaviour in front of other co-workers. The most important appeared to be the fact of co-workers using raised voice towards doctors: 38% (inpatient health care) and 20% (outpatient health care), where  $p=0.0004$ .

The wards with the highest risk of other doctors using raised voice towards the respondents were: neurology (50%), internal medicine (48%), psychiatry (43%), and the least threatened were obstetrics and gynaecology (26%) and family medicine (20%). There was also a statistically significant relationship ( $p=0.0033$ ) for verbal aggression presented by nurses working together with doctors. It happened mainly in the following wards: paediatrics, surgery and internal medicine (on average about 25% of each).

The position of the doctor influenced the percentage of people having contact with different forms of aggression. The group was divided into three subgroups: junior doctors, senior doctors, managerial positions. In the case of patient-inflicted aggression (raised voice), in 87% of cases it affected a senior doctor whereas assault, hitting was reported by 12% of junior doctors, 9% – senior doctors and 2% of managers. We observed that the lower the doctor's seniority and status the higher percentage of aggressive behaviours, e.g. raised voice: junior doctors (37%), senior doctors (28%), people on managerial positions (23%). None of the results was statistically significant to evaluate the relationship between the aggression inflicted by nurses and subordinates and the doctor's position.

The causes of aggression most often quoted by doctors included: staff shortages (9%), stress-tiredness (9%). Unfortunately, as many as 57% of respondents were not able to specify the reason of aggression in their workplace.

## Discussion

Physician's job is connected with contacts with other people, patients and colleagues. We expect doctors to be professional 24 hours a day, irrespective of their disposition and biological rhythm. Among the factors of professional risk occurring in work environment we should mention the shift work intolerance syndrome, which appears in the case of overwork. Also

emotional exhaustion and a negative organic reaction to stress might appear [5].

Doctors, as a profession, are exposed to psychosocial burdens resulting from practicing their profession. The research carried out among doctors employed on the territory of Silesia indicate that overwork affects 68.3% of subjects [6].

The problem which is often overlooked in the medical environment is the violence inflicted by patients and colleagues. Very little research on this issue has been done so far in Poland. Such studies have only been carried out in the group of nurses and midwives [5-8].

The study conducted in Michigan, North America, in the group of doctors employed in outpatient health care showed that the most common form of violence were verbal threats from patients (74.9%), physical assault was experienced by 11.7% of subjects. Female doctors (95%) were certainly the ones who were most often exposed to physical aggression, and the majority of doctors employed in open health care were intimidated by patients (87.5%) [9].

The present study does not indicate that there is a significant influence of gender on the frequency of aggression. What is to a certain extent surprising is that fact that these were actually men who more often complained about aggressive behaviour. Patients' threats were in 57% used towards women and in 66% towards men. Hitting attempts occurred more often in relation to men (27%), than women (16%). Also fellow doctors used raised voice more often towards men (40%) than women (31%). Nurses, however, more often raised their voice in front of female doctors (21%) than male doctors (17%).

The place of work of questioned subjects had a significant influence on the occurrence of aggression. The study conducted in Great Britain indicates that about 60% of doctors employed in psychiatric departments dealt with patients' aggression in their everyday work [4]. Also in our study, the psychiatric department proved to be one of the most often quoted places of work where there appears aggression, inflicted both by patients, bosses and colleagues. Other high-risk wards were: admission rooms, surgery and neurology wards. The most "calm" places were outpatient medical centres.

Another threat in doctor's work is the growing competition between doctors and negative interpersonal relations. The research conducted in Austria shows that 7.8% of hospital workers are or have been subjected to terror and abuse in the workplace. Most often, physical violence was experienced by people aged 36-45 years, employees of teaching hospitals and specialists. In the vast majority of cases, these problems were originated by superiors. The data have been collected in the Medical Chamber of Rhineland, Germany [10,11].

Experiencing workplace violence has a significant influence on professional functioning of medical workers. The report on psychosocial factors in Poland has started relatively recently. For many years, the psychosocial stimulus was described as „a subjective creation of an individual mind". Despite the difficulties connected with measuring psychosocial factors and determining the character of threat they pose, there is a number of reasons why it is worth-while to develop strategies of preventing their negative effects [12].

Improper relations in the therapeutic team lead to frustra-

tion, addictions and professional burn out. The research conducted by Fengler confirms that the people whose profession is to help others are chronically burdened and threatened with diseases, addictions and suicide [12,13].

According to the recommendations of WHO workplace aggression prevention should be realized by means of primary, secondary and tertiary prevention.

## Conclusions

1. Workplace aggression towards doctors may be inflicted both by their patients and colleagues.
2. Workplace aggression in the medical environment may take on different forms and create a threat in the workplace.
3. Doctors working in hospital departments (psychiatry, surgery, neurology) are the most exposed to aggression.

## References

1. Marcinkowski JT, editor. Higiena, profilaktyka w zawodach medycznych. Poznań: Wydawnictwo Akademii Medycznej; 2002, p.15-71.
2. Jansen GJ, Dassen TWN, Jebbink GG. Staff attitudes towards aggression in health care: review of the literature. *J Psych Mental Health Nurs*, 2005; 12: 3-13.
3. Needham I, Abdrhalden C, Zeller A, Dassen T. The effect of a training course on nursing students' attitudes toward, perceptions of, and confidence in managing patient aggression. *J Nurs Edu*, 2005; 44: 415-20.
4. Conlin Shaw MM. Aggression toward staff by nursing home residents. *J Gerontol Nurs*, 2004; 30: 43-54.
5. Dudek B, Waszkowska M, Merecz D, Hanke W. Ochrona zdrowia pracowników przed skutkami stresu zawodowego. Łódź: Instytut Medycyny Pracy im. Prof. J Nofera; 1999, p. 9-26.
6. Joško J, Kasperczyk P, Gościkiewicz P, Borczykowski J, Juszczyk J, Klimasara J, Luszczyk A, Mazurek Ł, Oleś E. Stres – jedynie tego nie brakuje lekarzom. *Probl Hig Epidemiol*. 2006; 87: 198-200.
7. Jankowiak B, Kowalczyk K, Krajewska-Kulak E, Sobolewski M, Sierakowska M, Lewko J. Narażenie pielęgniarzek na agresję w miejscu pracy. *Ann Univ MC-S Sectio D*, 2006; 2: 458-63.
8. Jankowiak B, Kowalczyk K, Krajewska-Kulak E, Klimaszewska K, Rolka H, Krajewska K, Baranowska A, Sobolewski M. Narażenie położnych na agresję w miejscu pracy – doniesienie wstępne. *Ann Acad Med Siles*, 2006; 5: 1-5.
9. Kowalenko T, Walters BJ, Khare RK, Compton S. Workplace violence: a survey of emergency physicians in the State of Michigan. *AEM*, 2005; 46: 142-7.
10. Grabowski P. Patologia Zarządzania. Mobbing – zjawisko przemocy psychicznej w miejscu pracy. *Antidotum*, 2002; 5: 29-37.
11. Nolan P, Dallender J, Soares J, Thomsen S, Arnetz B. Violence in mental health care: the experiences of mental health nurses and psychiatrists. *J Advan Nurs*, 1999; 30: 934-41.
12. Fengler J. Pomaganie mężczy – wypalenie w pracy zawodowej. Gdańsk: Gdańskie Wydawnictwo Psychologiczne; 2000, p. 95-100.
13. Flitcraft A. Project SAFE: Domestic violence education for practicing physicians. *Women's Health Issues*. Winter, 1995; 5: 183-8.