AGGRESSION IN THE WORK ENVIRONMENT OF PHYSIOTHERAPISTS

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SUMMARY

Background: Aggression in the medical environment can take on different forms. It can be inflicted both by patients and workmates and may also cause a rise of aggressive behavior performed by the physiotherapists themselves. The aim of the study was to evaluate possible danger that may occur in the working environment of physiotherapists as well as to assess the correlation between such factors as the length of professional experience and exposure to the aggression inflicted by patients and workmates in the workplace with the level of aggression occurring within the professional group of physiotherapists.

Subjects and methods: The study was conducted among 50 physiotherapists from Opole and the Silesian Voivodships in Poland. Two types of questionnaires were used: the author's own questionnaire, assessing exposure of the physiotherapists to aggression in the workplace, and the Buss-Perry Aggression Questionnaire. The results were analyzed with the Statistica 8.0 application.

Results: 60% of participants suffered from patients' verbal aggression, 8% from physical aggression and 26% from the patients' emotional self-aggression at least twice a month. The study showed a minor correlation between the duration of the length of professional experience and the level of hostility (r=0.2; p>0.05). There is a considerable impact of negative emotions present in relations with workmates at the workplace causing mainly increase of general aggression among physiotherapists and hostility. Similarly, negative emotions that may appear in relations between psychiatrists and patients show a positive correlation with the level of general aggression developed by doctors.

Conclusions: It can be observed that there is a huge impact of the impulsive behaviour and attitude (presented both by patients and workmates in the workplaces) on the appearance of aggressive actions by physiotherapists (especially anger and hostility). Further research in this field is needed.

Key words: aggression – physiotherapists - professional experience

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INTRODUCTION

The very term "aggression" is ambiguous and for many years has been a subject of discussion and consideration for scientists representing different disciplines. It is understood that this action is directed against people or objects causing human dissatisfaction or anger, and the aim of any aggression is to harm the object of it (Okoń 1984). It is assumed that aggression should always be attributed with the intention of causing damage, which was its main differentiator so far, without distinction whether the source of it was biological or social (Skorny 1968). Aggression is defined as a type of behaviour directed both inside and outside, causing harm physically, psychologically or symbolically. Its sources can be found in the inner motives of various etiologies, and often manifests itself as a defense mechanism in case of emergency. It can be presented to the same extent by constructive and destructive acts against oneself or others. Aggression that appears in the medical community may take many forms and threatens the safety in the workplace. It can be the result of deliberate action by patients and colleagues, often leading directly to increased sequent, aggressive behavior on the part of its victims including the professionally active physiotherapist (Dawydzik 2003). Aggression in the workplace is not a new or specific phenomenon. Numerous studies have demonstrated the negative consequences of aggression, which when it occurs, may endanger the functioning of institutions and employees. The medical community is in the second place in the classification of the greatest exposure to violence in the workplace. The European Commission defines aggression in the workplace as incidents in which persons are exposed to threats, assault or harassment, including direct or indirect threat to the safety, health or welfare, in situations related to their work. The factors that could potentially cause aggressive behavior are primarily anxiety, provocation and insult. They may occur not only in relations with the patient, but also with co-workers (Chappell et al. 1999). Until now the subject of studies was aggression appearing in the medical community from the outside, but there are no comprehensive studies of aggression directed at supervisors, subordinates and workmates, including physical therapists in the environment. The aim of the study was to evaluate possible danger that occur in the working environment physiotherapists as well as to assess the correlation between such factors as seniority and exposure to the aggression inflicted by patients and workmates in the workplace with the level of aggression occurring within the professional group of physiotherapists.

SUBJECTS AND METHODS

Subjects

A group of 50 physical therapists (31 women and 19 men) from the province of Opole and Silesia was

examined in March 2011. The average age was 42.9 years (+/-9.3), including a group of men 44.9 years (+/-9.4), and women 41.6 (+/-9.2). The average length of work experience among respondents was 19.6 years (+/-9.8), of which the lowest value was equal to a 12-month period and the highest to 40 years.

Methods

In order to perform the study an authors' questionnaire was used (A. Szczegielniak, A. Skowronek, E. Debska, P. Frey, K. Wydra) assessing the severity of negative emotions such as fear of criticism, envy, alienation, helplessness and fatigue and exposure to aggression caused by the patients and co-workers in physical therapists, as well as the A. Buss and M. Perry aggression questionnaire. In the first questionnaire the respondents were asked about their feelings appearing in relations with workmates, and scored on a scale of 0 to 5 (fear of criticism, anger, alienation, jealousy, sadness) and with the patients, using the same score range of the scale (fear of contact with the patient, anger, powerlessness, impatience, fatigue). It should also be pointed out that the possibility of a manifestation such a behaviour as unwarranted guilt, violent dreams or increased interest in extreme sports, during the last 3 months, was checked in the group of physiotherapists. They were also asked about the types of aggression by patients encountered in their daily work. The Buss-Perry Aggression Questionnaire consists of 29 points and each of the questions is designed to measure aggression (physical/verbal) or anger or hostility. The respondent was supposed to give a response from the rank of "totally does not suit me" to "totally fits me" (1-5).

Data analysis and statistics

The survey was anonymous. The results were analyzed statistically using the Statistica 8.0 application. Using Student's t-test for independent groups and correlation analysis the relationship between the length of work experience and exposure to negative emotions and actions in the work environment and the level of aggression among physiotherapists was examined.

RESULTS

At the time, when the study was done, 40 people worked in the province of Opole (23 women, 17 men),

10 were employed full-time in the Silesian Province (8) women, 2 men). A vast majority of them worked in the multidisciplinary hospital -31 physiotherapists (13 men, 18 women), 16 persons reported an employment in a rehabilitation facility (5 men, 11 women), 2 in the outpatient rehabilitation services (1 man and 1 woman) and 7 admitted to working in a private practice (5 men. 2 women). One respondent was excluded from the study because of the constant use of antidepressants. None of the physiotherapists at the time used sedatives, analgesics were taken by 6 women on a regular basis, two respondents were using anti-allergic drugs and in one of them the medication related to the treatment of hypertension. Physiotherapists did not admit to taking drugs, 11 of them reported occasional drinking (5 men, 6 women), 8 smoke cigarettes (5 people and 10 units/day, 3 to 30 units/day). Aggression performed by patients and directed towards health service workers such as physiotherapists is a common problem. More than 2/3 of all respondents have actually suffered from a patient's act of aggression, however nobody had ever needed professional medical care after such acts. A group of 30 physiotherapists (60%) admitted meeting with verbal aggression from patients; 12 men and 18 women. For 77% the patients' aggressive verbal behaviour has been present for not more than twice in a month, 20% reported it once-twice a week and for 3% it is a daily routine. What is important was that, in the group where aggressive behavior occurred more often, women were more exposed to danger. Only 8% of all respondents suffered from physical aggression performed by patients (not more than twice a month), ³/₄ of this group were women. 26% were witnesses of patients' emotional self-aggression (6 women, 7 men). 12% admitted to see it approximately once or twice a week, the rest of the cases were definitely more rare (not more than twice a month). No one met with physical self-aggression performed by patients. Nobody in the group has ever needed medical assistance after these incidents. The level of general aggression as well as for physical aggression, verbal aggression, anger and hostility among physiotherapists is lower in comparison with the Polish population. Men have a higher score than women in physical aggression and hostilty, and a lower score in anger. It is the same pattern as in the general population, however the level of anger is definitely lower among physiotherapists. What is different is the higher score in verbal aggression in the womens' physiotherapists group (Table 1).

Table 1. Buss- Perry Aggression Questionnaire- average scores

	Polish population			Physiotherapists		
	Both sexes	Men	Women	Both sexes	Men	Women
Physical aggression	20.9	22.9	18.9	15.8	17.0	15.1
Verbal aggression	15.1	15.7	14.4	14.3	13.8	14.2
Anger	19.1	19.1	19.2	16.8	16.3	17.3
Hostile	22.7	23.6	21.8	19.4	20.4	18.9
Total	70.8	81.4	74.3	66.4	67.3	65.4

Table 2. Buss-Perry Aggression Questionnaire: differences in scores between drinkers and non-drinkers

	Physical aggression	Verbal aggression	Anger	Hostile	General Aggression
Alcohol drinkers	14.10	12.70	17.10	16.10	60
Non-drinkers	16.15	14. 82	16.39	20.38	67.74

22% of the participants admitted drinking alcohol on a regular basis. What is interesting is that the level of general aggression, as well as physical aggression, verbal aggression, anger and hostility among drinkers is lower than among non-drinkers (Table 2).

The study showed that with increasing length of service, the level of hostility increases among physical therapists (r=0.2, p>0.05), while the level of verbal

aggression, physical aggression and anger remains practically unchanged (p>0.05) (Figure 1).

It was found that increased exposure to verbal aggression increases the overall level of aggression (r=0.32, p=0.02), as well as that of verbal aggression (r=0.30, p=0.03) and hostility (r=0.28, p=0.05) among respondents (Figure 2).

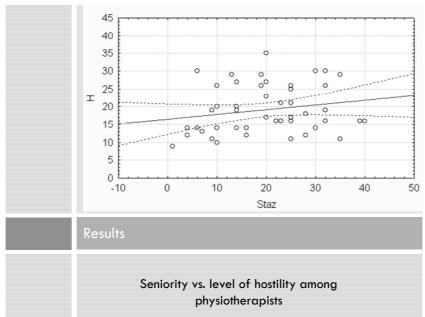


Figure 1. Seniority vs. level of hostility among physiotherapists

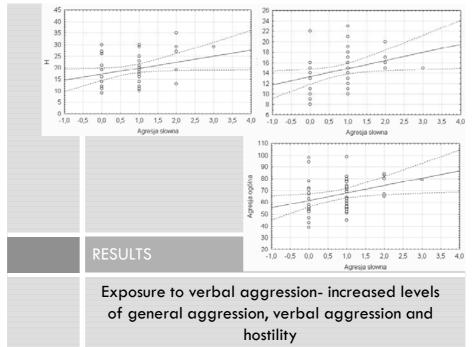


Figure 2. Causes of exposure to verbal aggression performed by aptients

Similarly, the presence of patients' emotional self-aggression causes a visible increase in the level of physical aggression among therapists (r=0.36, p=0.01) (Figure 3).

The correlation between feelings occurring in contacts with patients and increase of the physiotherapists' overall level of aggression includes perceived fatigue (r=0.482, P=0.000) and impatience (r=0.3791, p=0.007). The level of hostility rises in the group of respondents under the influence of increasing fear of the patient (r=0.2871, p=0.05), weariness (r=0.456, p=0.01) and fatigue (r=0.3064, p=0.032). While an increase can be observed in the correlation of anger with anger at the

patient (r=0.302, p=0.035), fatigue (r=0.3054, p=0.032) and impatience (r=0.332, p=0.02) (Figure 4).

The correlation between emotions occurring when dealing with colleagues at work is distributed as follows: the overall level of aggression observed in connection with the feelings of anger at colleagues (r=3.581, p=0.012), sadness (r=0.4127, p=0.003), increased hostility, observed alienation (r=0.2884, p=0.045), envy (r=0.3606, p=0.045) and sadness (r=0.3252, p=0.05) (Figure 5).

The anger in relationships with colleagues correlates with sadness (r=0.3732, p=0.008) (Figure 6).

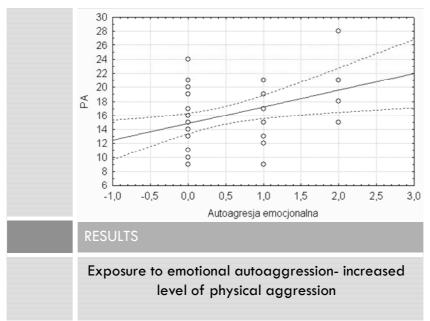


Figure 3. Causes of exposure to patients' emotional autoaggression

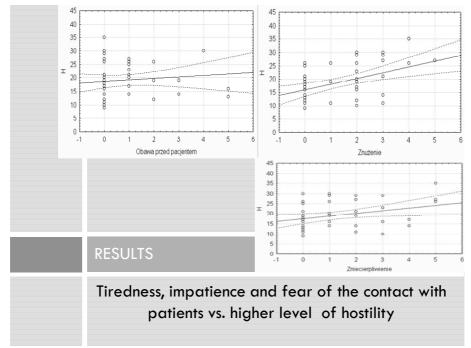


Figure 4. Higher level of hostility vs. tiredness, impatience and fear of the contact with patient

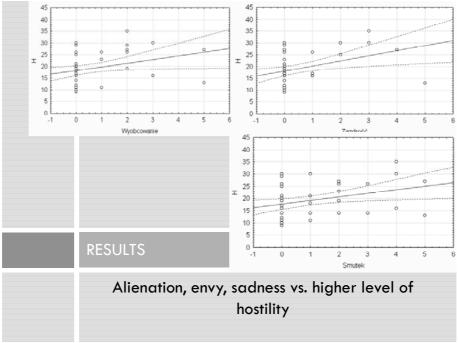


Figure 5. Higher level of hostility vs. alienation, envy sadness

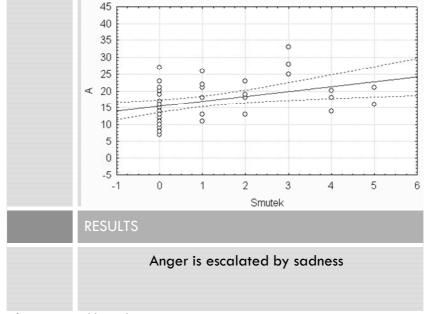


Figure 6. Escalation of anger caused by sadness

DISCUSSION

So far there have not been very much accessible data about aggression appearing in the medical community. And it is still more difficult to find reports assessing the level of aggression among physiotherapists in comparison with studies examining physicians of different specialties, nurses and midwives. The sources of aggression are the competition between representatives of the health care system and negative interpersonal relationships, which very often are the result of high demands and low wages. A study, which took place in Austria, shows that 7.8% of hospital staff is or has been

subjected to terror and psychological abuse in the workplace. Aggression and violence primarily focus on people aged 35-45 years, working in university hospitals and specialists. Most conflicts are caused by superiors (Crilly et al. 2004, Grabowski 2002). Aggressive behaviour is the reason for the unpleasant atmosphere in the workplace. Certain behaviours of patients also affects it. According to research conducted in Poland in 2007 among doctors working in Podlaskie province, the major source of stress for doctors caused by their patients were a menacing attitude (53%) and blackmail (41%). In comparison, the vulgar behaviour presented by co-workers (18%) and threats (17%) were the main

causes of stress induced by superiors and colleagues. Also the usage of a raised voice at work by physicians (44%) and nurses (25%) were considered to be a highly stressful factor (Kowalczuk et al. 2009). Subsequent researchers have shown that factors considered to be a stressful situation for the physician may be: excessive fatigue due to work (68.3% of respondents) and a bad atmosphere at work (49.4%). Too low salary was a problem for 97.4% of respondents. What is interesting, is that a lot depends on the geographical area in which respondents work. The least satisfied with their working wages, work organization and the conditions, atmosphere was the group of medical doctors from Silesia. (Jośko et al. 2006). Not without significance is the workplace. Studies conducted in Britain showed that almost 60% of psychiatrists meet with aggression coming from patients every day (Conlin 2004). Another one, conducted in Poland, reports that psychiatric units are the places where statistically acts of aggression occur most commonly, caused both by patients and coworkers and supervisors (Kozmin et al. 2011, Kowalska et al. 2012). For other jobs, "high risk" ones also include employment in the departments of surgery, neurology and the admissions room. Definitely the least stressful job is waiting for doctors in the outpatient clinics (Nolan et al. 1990). Abnormal interpersonal relationships among health care workers not only lead to frustration, addiction, but also to the burnout. Those who help others very often fall into addiction, illness and become suicide victims (Fengler 2000). In our study similar hazards occurring in the workplace have been demonstrated. Increased exposure to aggressive behaviour experienced from patients and workmates may lead to increased levels of aggression appearing in or demonstrated by the affected person in the future.

CONCLUSIONS

In our study it is demonstrated that physiotherapists are working in an environment which predisposes them to meet with aggressive behavior.

There is a significant influence on the examined population of aggressive behavior and negative emotions, presented by both patients and workmates.

The results indicate the possible need to periodically assess the mental status of physiotherapists.

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