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Aggressive Patient in Healthcare Facility – Experience of a Selected Sample of Nurses in the Czech Republic: Descriptive, Cross-Sectional Study

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Summary

Aim: To identify and describe the experience of a selected sample of nurses with aggressive behaviour by patients and their family members. To describe what nurses rate as the most common causes of aggression and what strategies nurses most commonly use to manage it. To determine whether there is a statistically significant association between the incidence of aggressive behaviour and length of practice in the selected sample of nurses. **Methods:** This study included a group of nurses from a selected healthcare facility, totalling 67 nurses. A self-constructed questionnaire was used. The data were processed in STATISTICA 12 software using descriptive statistics and Spearman's correlation coefficient. This study complied with the EQUATOR (STROBE) checklist. **Results:** More than 70% of the nurses in our study had experienced aggressive behaviour by a patient. Nurses are most often exposed to verbal aggression, especially swearing and insults. Less frequently, they encounter physical assault. Most often, it is the patients who are aggressive; patients' families or visitors are rarely aggressive. To manage aggressive behaviour, nurses most often use calm, assertive communication. In the selected sample of nurses, there was no significant association between the incidence of aggressive behaviour and length of nursing experience. **Conclusions:** Our results show that most of the nurses in the selected sample have negative experiences with aggressive behaviour. Knowledge of assertive communication can significantly contribute to minimising conflicts associated with aggressive behaviours in patients. The research conducted may serve as a basis for further research.

Keywords

aggressive patient, healthcare, nurse, nursing

1 Introduction

The issue of aggression in healthcare facilities is a global, current, and serious problem. A joint programme of ILO (International Labour Office), ICN (International Council of Nurses), WHO (World Health Organization), and PSI (Public Services International) defines workplace violence as incidents in which employees are abused, threatened, or assaulted in situations related to their work. These negative acts can occur in the workplace and involve travel to and from work. In these situations, the safety and health of employees are at risk (WHO, 2021). Nurses report an increased risk of exposure to aggressive behaviour from patients and their family members across available studies (Partridge & Affleck, 2018; Homotoff, 2021; Schablon et al., 2018; Dafny & Beccaria, 2020). Nurses spend more time with patients than other health professionals, which is one reason why they might be more likely to experience aggressive behaviour towards them (Royal College of Nursing, 2018). Other possible risk factors that could lead to such behaviour include intoxication (Kaeser et al., 2018), certain illnesses such as psychiatric illness (Grassi et al., 2006; Kołodziej et al., 2021), or dementia (Song & Oh, 2015). Additionally, a history of violent conflict in the past could also be a contributing factor (El-Bardi & Mellsop, 2006). It has been shown that dissatisfaction and failure to meet basic needs can significantly influence the emergence of conflict situations that can escalate to physical assault of the health care worker. Nurses are most often subjected to verbal aggression from patients and their family members (Schablon et al., 2018). Exposure to aggressive behaviour increases the level of stress experienced (AP Association, 2013), which negatively affects the health of nurses (Chatzigianni, 2018), reduces job satisfaction, and can negatively affect the quality of care provided (Gu et al., 2019). There is evidence that nurses often rely on the support of their colleagues and organisations to manage aggressive conflicts. When support and prevention are effectively set up, nurses can effectively process the traumatic experiences they face in relation to aggressive incidents (Cooper et al., 2020). This study aims to improve our understanding of the experiences of a group of selected nurses. It describes the situations where nurses encounter aggressive behaviour and contributes to developing preventive measures in the healthcare facility where the study was conducted.

1.1 Aim

This study aimed to examine how nurses cope with aggressive behaviour displayed by patients and their family members. The study focused on identifying the most frequent causes of aggression and the strategies employed by nurses to manage it. Additionally, the study aimed to determine if there is a significant correlation between the frequency of aggressive behaviour and the length of practice in the nursing profession.

2 Material and Method

A descriptive, cross-sectional study was conducted. A self-constructed questionnaire based on primary documents dealing with the issue of labour violence was used. In particular, the Joint Programme on Workplace Violence in the Health Sector, Survey Questionnaire and Framework guidelines for addressing workplace violence in the health sector were used (WHO, 2003). In

addition, publications dealing with aggression in healthcare as such were used, e. g. Babiarczyk et al. (2019), Schablon et al. (2018), and Alsaleem et al. (2018). Prior to the actual construction of the questionnaire, interviews were conducted with healthcare facility managers to define the purpose of the questionnaire and its requirements. Due to the specificity of the questionnaire and its link to a specific healthcare facility, its construction is based on the requirements of the management of the hospitals, who preferred a modified shorter version based on the above publications. At the same time, due to the time available for conducting the research, it was not possible to conduct test-retest validity tests. Other variants of the Split half type validation were also not possible due to the number of respondents who were part of the organisation that made the research possible as a start of further work on this issue.

The first part of the questionnaire focused on the respondents' demographic data. In the second part, respondents' experiences of patient aggression and their strategies for coping with aggressive behaviour were collected. A total of fourteen main items were included, with five items being identification and demographic items and the rest of the items aimed at identifying respondents' experiences. Each of the main items contained 6-13 sub-questions, e. g. item 6: "Rate all the warning signs listed in the table. In your experience, how often has a particular form of patient aggression manifested itself in the last 12 months? Screaming and raised voice, swearing and insults, irony and jocularly, refusal of care, psychomotor restlessness, damaging things, throwing things, etc. Coping strategies for aggressive behaviour included efforts to verbally calm down, leaving the room, giving prescribed medication, calling for help, etc." The questionnaire was scored using a Likert scale (0 - never, 1 - rarely, 2 - occasionally, 3 - monthly, 4 - weekly, 5 - daily) on which respondents recorded the frequency of aggressive behaviour they were exposed to. At the same time, the respondents were given space for their responses. A total of 96 questionnaires were distributed. This number was based on the current capacity of the healthcare facility where data collection took place. The return rate was 79.17% (76 questionnaires). Out of these, nine questionnaires were excluded due to incompleteness. The study was conducted in accordance with the Declaration of Helsinki on Human Resource Research. Data collection was conducted in April 2021.

The sample of respondents consisted of general nurses from the selected healthcare facility. The sample selection was deliberate. After interviewing the managers of the selected healthcare facility and obtaining consent, head and ward nurses were approached and asked to distribute paper questionnaires to general and practical nurses according to the following criteria:

Nurses working in standard inpatient wards of internal medicine and surgery were included based on the predefined criteria: employment in the selected healthcare facility, at least one year of clinical experience and voluntary participation in the study. A total of 67 nurses participated in the final cohort. Further information about the respondents is presented in Table 1. Respondents were informed about anonymity, voluntary participation in the study, and the possibility of withdrawing at any time during the study. All respondents agreed to be included in the study after being instructed.

Table 1. Characteristics of nurses

Characteristics	n	%	n ¹	%	n ²	%
Sex						
women	65	97.01	48	71.64	17	25.37
man	2	2.99	1	1.64	1	1.64
Position at work						
head and ward nurse	3	4.48	3	4.48	0	>0.05
general and practical nurse	64	95.52	46	68.66	18	26.87
Ward						
surgery	10	14.93	8	11.94	2	2.99
geriatrics	10	14.93	7	10.45	3	4.48
urology	10	14.93	5	7.46	5	7.46
neurology	11	16.42	11	16.42	0	>0.05
psychiatry	12	17.91	7	10.45	5	7.46
general	14	20.90	11	16.42	3	4.48
Duration of professional experience						
1-5	25	37.31	20	29.85	5	7.46
6-10	8	11.94	5	7.46	3	4.48
11-20	13	19.40	10	14.93	3	4.48
21 and more	21	31.35	15	22.39	7	10.45
Duration of professional experience in the actual department						
1-5	35	52.24	26	38.81	9	13.43
6-10	9	13.43	6	8.96	3	4.48
11-20	10	14.93	5	7.46	5	7.46
21 and more	13	19.40	12	17.91	1	1.64

n – total number of respondents; n¹ - respondents reporting experience of aggressive behaviour; n² - respondents who do not experience aggressive behaviour

The data obtained were processed in MS Office Excel and STATISTICA 12, using descriptive statistics, especially using mean, standard deviation, mode, frequency of mode, median, minimum, and maximum value. The normality of the data distribution was verified using the Shapiro-Wilk test. Spearman's correlation coefficient was used to show the association between the incidence of aggressive behaviour, age, and length of experience of the respondents. This study complied with the EQUATOR (STROBE) checklist.

3 Results

Out of 67 nurses, 73.13% (n=49) experienced aggressive behaviour by a patient. Nurses are mostly exposed to swearing, insults, irony, sarcasm, passivity, non-communication, and patients refusing treatment. 59.70% (n=40) of nurses were exposed to physical aggression at least once in the past 12 months. 6.10% of the 49 nurses (n=3) exposed to aggressive behaviour required treatment for injury by a physician and 4.08% of nurses (n=2) were on sick leave related to the injury. Respondents reported pain and lack of information as the most common cause of aggression. On the other hand, the least frequent cause of aggression was the illness itself. The complete results of the frequency of aggressive behaviour and causes are described in Table 2.

Table 2. Types of aggressive behaviour and its causes

Manifestations of aggressive behaviour	m	sd	me	mod	mod (x)	min	max
Raised voice, shouting	2.97	1.07	3.00	3.00	18	1	5
Swearing, insults	2.61	1.13	3.00	3.00	16	1	5
Threats	1.26	1.33	1.00	0.00	17	0	5
Self-harm	1.46	1.35	2.00	0.00	19	0	4
Irony, sarcasm	2.69	1.17	3.00	3.00	16	0	5
Refusal of treatment	2.79	1.22	3.00	3.00	15	0	5
Passivity, uncommunicativeness	2.91	1.23	3.00	3.00	17	0	5
Psychomotor restlessness	2.57	1.20	3.00	3.00	23	0	5
Damaging things	1.97	1.19	2.00	3.00	16	0	5
Kicking hospital equipment	1.97	1.19	2.00	3.00	15	0	4
Clenching fists, teeth	2.16	1.17	2.00	3.00	16	0	4
Scratching	1.85	1.15	2.00	2.00	14	0	4
Biting	1.75	1.16	2.00	2.00	14	0	4
Physical assault, kicking	1.06	1.08	1.00	0.00	21	0	3
<i>Causes of aggressive behaviour</i>							
Acute disease	1.14	1.20	1.00	0.00	20	0	4
Pain	3.30	1.50	4.00	5.00	14	0	5
Intoxication	2.57	1.52	2.00	2.00	13	0	5
Lack of information	3.08	1.81	3.00	5.00	16	0	5
Stress	1.46	1.08	2.00	2.00	23	0	5
Post-operative condition	2.51	1.29	3.00	3.00	19	0	5
Failure to meet basic needs	1.48	1.58	1.00	0.00	19	0	5
Time pressure (waiting)	2.08	1.39	2.00	2.00	16	0	5

m – mean; sd – standard deviation; me – median; mod – mode; mod (x) frequency of mode; min – minimum value; max – maximum value

Nurses who have experienced aggressive behaviour (n=49) are most often exposed to patient aggression. There were no significant differences between patients (p=0.629). Male patients/men achieved a mean score of 2.77, while female patients/females achieved a mean score of 2.67, indicating that, on average, the nurses experienced aggressive behaviour at a frequency ranging from once every six months to several times per month. On the other hand, nurses are rarely exposed to aggression from family members or visitors. Detailed results are described in Table 3 Perpetrators of aggressive behaviour.

Table 3. Perpetrators of aggressive behaviour

Person	Never n/%	Rarely n/%	Sometimes n/%	Monthly n/%	Weekly n/%	Daily n/%
Female patient /Female	2 / 4.08	5 / 10.20	13 / 26.53	17 /34.69	11 / 22.45	1 / 2.04
Male patient /Male	1 / 2.04	6 / 12.24	12 / 24.49	19 /38.78	6 / 12.24	5 /10.20
Family member	13 / 26.53	15 / 30.61	12 / 24.49	7 / 14.29	2/4.08	0 / >0.05
Visitor	20 / 40.82	12 / 24.49	9 / 18.37	6 /12.24	2/4.08	0 / >0.05

n – total number of respondents

Among the strategies to manage aggressive behaviour, the nurses most often choose the technique of active listening and the use of restraints. Only minimally do nurses call for help to manage aggressive behaviour or seek help after the act of aggression. The selected coping strategies of nurses are shown in Table 4.

Table 4. Strategies for coping with aggression

Strategies	m	sd	me	mod	mod (x)	min	max
Leaving the room	1.38	1.20	1.00	0.00	16	0	4
Verbal reassurance, explanation of the situation	1.42	1.35	1.00	0.00	17	0	5
Active listening	3.73	1.31	4.00	5.00	18	1	5
Retaliating with the same form of aggression	2.91	1.48	3.00	4.00	12	0	5
Calling for backup and seeking help	0.26	0.70	0.00	0.00	41	0	3
Administering sedative medication as prescribed by the doctor	2.81	1.33	3.00	3.00	15	0	5
Use of restraints (restraints, belts, etc.)	3.22	1.51	3.00	Multiple	12	0	5

m – mean; sd – standard deviation; me – median; mod – mode; mod (x) frequency of mode; min – minimum value; max – maximum value

To demonstrate the correlation between the incidence of aggressive behaviour and the length of nursing experience, a weak correlation was found between the incidence of aggressive behaviour and the total length of nursing experience. A weak correlation was also found in the relationship between the incidence of aggressive behaviour and the length of nursing experience at the current workplace. The exact values are shown in Table 5.

Table 5. The relationship between the occurrence of aggressive behaviour and the length of practice

<i>Spearman correlation</i>	Experience with aggressive behaviour	p
Duration of professional experience	0.21	≤,05000
Duration of professional experience in the actual department	0.33	

p-value

4 Discussion

This study was conducted to identify and describe the experience of a selected sample of nurses with aggressive behaviour by patients and their family members. Furthermore, to describe what the nurses rate as the most common causes of aggression and what strategies nurses use to manage it. More than two-thirds of the nurses in our study had experienced aggressive behaviour from a patient. Schablon et al. (2018) came to the same conclusions in their study, reporting a prevalence of patient attacks of over 90%; as in our study, verbal attacks (swearing, insults, threats) predominate, while physical violence such as pinching, scratching and hitting are less frequent. Many studies have shown that nurses working in an emergency department, psychiatric ward or geriatric ward are exposed to aggressive behaviour at a higher frequency than in other wards (El-Bardi & Mellso, 2006; Ayhan et al., 2021; Ashton et al., 2018; Pelto-Peri et al., 2020). Although we included nurses working in the psychiatric and geriatric wards in our sample, there was no evidence that these nurses were exposed to aggressive behaviour more often than the nurses from the other wards. Due to the number of nurses included in our study, it is not possible to generalise our results. More than 90% of nurses also described experiences of aggressive behaviour in the study by Yang et al. (2018), who also focused on nurses' coping strategies. Our results concur in the use of communication skills to resolve conflict and calm the patient. Furthermore, up to 60% of nurses in Yang's study sought help and reinforcement from supervisors or colleagues. This is where the results of our study significantly differ. Calling for reinforcement and seeking help is the least used strategy among our sample of nurses. This strategy was used only in isolated cases by nurses in our sample, and its frequency of use was only 0.26 points. This may prompt further research. The cause may be, for example, ignorance of procedures or poorly set rules when aggressive behaviour occurs. Remarkable findings are described in a study by Ulrich et al. (2018), who found a significant effect of environment on the rate of occurrence of aggressive behaviour. The conceptual model they developed is based on the assumption that occurring environmental stressors such as noise, loss of privacy, and removal from familiar surroundings significantly increase the level of stress experi-

enced, which prompts and increases aggressive acts. Environmental modification can significantly reduce stress levels in hospitals. This can be achieved by providing rooms with fewer patients, sufficiently large common areas, eliminating noise, and offering positive distractions such as visiting the hospital garden, observing nature, and enjoying natural art. This was positively reflected in the level of aggression management measures used, with a 50% reduction in the number of physical restraints applied to patients. These findings are significant and should be considered when planning and modifying the ward environment.

Other important factors that may increase the risk of exposure to aggression include the demographic and personality characteristics of nurses. Nurses who have less work experience tend to be more vulnerable to exposure to aggression. Lack of personal and professional experience may negatively influence the rate of aggressive behaviour. More professional experience correlates with older age. However, this assumption was not confirmed in our sample. Other factors include, in particular, higher psychological resilience and sufficient communication skills (Stute et al., 2017).

A potential limitation of the study is the small sample size and the data collection period during the COVID-19 pandemic. At the same time, using a non-standardised tool may also be a limitation; however, the tool was chosen due to the specific requirements of the healthcare facility for the questionnaire items.

5 Conclusion

The worldwide rise of aggression is a serious problem that requires increased attention. Nurses experience violent behaviour across all types of wards. In our sample of nurses, verbal aggression was prevalent. There was no statistically significant association between the length of nursing experience of the nurses and the level of aggression they experienced. The conducted research highlighted the importance of nurses' communication skills and may provide a basis for further research.

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References

AP ASSOCIATION, et al. (2013). Diagnostic and statistical manual of mental disorders: diagnostic and statistical manual of mental disorders.

Ashton R. A., Morris L., & Smith I. A. (2018). Qualitative meta-synthesis of emergency department staff experiences of violence and aggression. *International emergency nursing*, 39, 13–19. <https://doi.org/10.1016/j.ienj.2017.12.004>

- Ayhan, D., Mercan, N., Doğan R., & Yüksel Ç. (2021). The aggressive patient experiences of health-care professionals exposed to physical violence in a psychiatric clinic: A phenomenological study. *Perspectives in psychiatric care*, 1–8. <https://doi.org/10.1111/ppc.12918>
- Chatziagianni, D., Tsounis, A., Markopoulos, N., & Sarafis, P. (2018). Occupational stress experienced by nurses working in a Greek Regional Hospital: A cross-sectional study. *Iranian journal of nursing and midwifery research*, 23(6), 450–457. https://dx.doi.org/10.4103/ijnmr.IJNMR_120_17
- Cooper, A. L., Brown, J. A., Rees, C. S., & Leslie, G. D. (2020). Nurse resilience: A concept analysis. *International journal of mental health nursing*, 29(4), 553–575. <https://doi.org/10.1111/inm.12721>
- Dafny, H.A., & Beccaria, G. (2020). I do not even tell my partner: Nurses' perceptions of verbal and physical violence against nurses working in a regional hospital. *Journal of clinical nursing*, 29(17-18), 3336–3348. <https://doi.org/10.1111/jocn.15362>
- El-Bardi, S.M., & Mellsop, G. (2006). Aggressive behaviour in an acute general adult psychiatric unit. *Psychiatric Bulletin*, 30(5), 166–168. <https://doi.org/10.1192/pb.30.5.166>
- Grassi, L., Biancosino, B., Marmai, L., Kotrotsiou, V., Zanchi, P., Peron, L., Marangoni, C., Vanni, A., & Barbui, C. (2006). Violence in psychiatric units. *Social Psychiatry and Psychiatric Epidemiology*, 41(9), 698–703. <https://doi.org/10.1007/s00127-006-0088-5>
- Gu, B., Tan, Q., & Zhao, S. (2019). The association between occupational stress and psychosomatic wellbeing among Chinese nurses: A cross-sectional survey. *Medicine*, 98(22), e15836. <https://doi.org/10.1097/MD.0000000000015836>
- Homotoff, K. (2021). Defusing aggressive behavior in the healthcare setting. *Journal of the American Academy of Pas.*, 34(9), 46–49. <https://doi.org/10.1097/01.JAA.0000758216.65209.27>
- Kaeser, D., Guerra, R., Keidar, O., Lanz, U., Moses, M., Kobel, C., Exadaktylos, A. K., & Ricklin, M. E. (2018). Verbal and non-verbal aggression in a Swiss university emergency room: a descriptive study. *International journal of environmental research and public health*, 15(7): 1423–1430. <https://doi.org/10.3390/ijerph15071423>
- Kołodziej, K., Lickiewicz, J., Jelonek, E., Mlocek, M., Murzyn, M., & Dudek, M. (2021). Psychiatric nurses' experiences of patient aggression. *Pielęgniarstwo XXI wieku/Nursing in the 21st Century*, 20(3), 160–167. <https://doi.org/10.2478/pielxxiw-2021-0021>
- Partridge, B., & Affleck, J. (2018). Predicting aggressive patient behaviour in a hospital emergency department: an empirical study of security officers using the Brøset violence checklist. *Australasian emergency care*, 21(1), 31–35. <https://doi.org/10.1016/j.auec.2017.11.001>
- Pelto-Piri, V., Warg, L. E., & Kjellin L. (2020). Violence and aggression in psychiatric inpatient care in Sweden: a critical incident technique analysis of staff descriptions. *BMC health services research*, 20(1), 1–11. <https://doi.org/10.1186/s12913-020-05239-w>
- Royal College of Nursing. (2018). Violence and aggression in the NHS: Estimating the size and the impact of the problem – an interim report. <https://www.rcn.org.uk/-/media/royal-college-of-nursing/documents/publications/2018/october/pdf-007301.pdf>

- Schablon, A., Wendeler, D., Kozak, A., Nienhaus, A., & Steinke, S. (2018). Prevalence and consequences of aggression and violence towards nursing and care staff in Germany—A survey. *International journal of environmental research and public health*, *15*(6), 1274–1292. <https://doi.org/10.3390/ijerph15061274>
- Song J., A., & Oh, Y. (2015). The association between the burden on formal caregivers and behavioral and psychological symptoms of dementia (BPSD) in Korean elderly in nursing homes. *Archives of Psychiatric Nursing*, *29*(5), 346–354. <https://doi.org/10.1016/j.apnu.2015.06.004>
- Stutte, K., Hahn, S., Fierz, K., & Zúñiga, F. (2017). Factors associated with aggressive behavior between residents and staff in nursing homes. *Geriatric nursing*, *38*(5), 398–405. <https://doi.org/10.1016/j.gerinurse.2017.02.001>
- Ulrich, R. S., Bogren, L., Gardiner, S. K, & Lundin, S. (2018). Psychiatric ward design can reduce aggressive behavior. *Journal of Environmental Psychology*, *57*, 53–66. <https://doi.org/10.1016/j.jenvp.2018.05.002>
- WHO, Framework guidelines for addressing workplace violence in the health sector / Joint Programme on Workplace Violence in the Health Sector [cited 12/20/2021] <https://apps.who.int/iris/handle/10665/42617>
- Yang, B. X., Stone, T.E., Petrini, M.A., & Morris, D. L. (2018). Incidence, type, related factors, and effect of workplace violence on mental health nurses: a cross-sectional survey. *Archives of psychiatric nursing*, *32*(1), 31–38. <https://doi.org/10.1016/j.apnu.2017.09.013>