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PREVALENCE OF VIOLENCE TOWARDS NURSING STAFF IN SLOVENIAN NURSING HOMES

PREVALENCA NASILJA NAD ZAPOSLENIMI V ZDRAVSTVENI NEGI V DOMOVIH STAREJŠIH OBČANOV

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ABSTRACT

Keywords:workplace violence, nursing, nursing homes

Introduction. The purpose of this research was to identify the prevalence of violence towards nursing staff in Slovenian nursing homes.

Methods. For the purpose of this study, a non-experimental sampling method was employed, using a structured questionnaire as a data collection instrument (n=527). The contents of the questionnaire proved valid and reliable, with a high enough degree of internal consistency (Cronbach Alpha minimum 0.82).

Results. The nursing staffs working in nursing homes for senior citizens are at high risk of violence. In the last year, the employees were most often faced with verbal violence (71.7%), physical violence (63.8%) and sexual violence (35.5%). 35.5% of employees suffered injuries at their working place. During aggressive outbursts of nursing home residents, employees particularly experience vulnerability, fear and insecurity.

Conclusion. There is a need for a comprehensive approach to tackle workplace violence. Some psychiatric health care facilities have already introduced certain measures in this field, and reduction of workplace violence proves that it is possible to reduce aggressive outbursts of patients. After conducting further quantitative research, which would expose detailed characteristics and the background of such violence, it would be sensible to develop similar measures in the field of health care in nursing homes.

IZVLEČEK

Ključne besede: nasilje na delovnem mestu, zdravstvena nega, domovi starejših občanov ${\it Uvod.}$ Namen raziskave je bil ugotoviti pojavnost nasilja, usmerjenega proti zaposlenim v zdravstveni negi v domovih starejših občanov.

Metode. Za to raziskavo smo uporabili neeksperimentalno metodo z anketnim vprašalnikom za zbiranje podatkov (n=527).

Rezultati. Raziskava je pokazala, da so zaposleni v zdravstveni negi v domovih za starejše v nevarnosti za nastanek nasilja. V zadnjem letu so se zaposleni največkrat soočili z verbalnim nasiljem (71,7%), fizičnim nasiljem (63,8%), in spolnim nasiljem (35,5%). 35,5% jih je bilo poškodovanih. Med agresivnim izbruhom se zaposleni soočajo z ranljivostjo, strahom in negotovostjo.

Zaključki. Raziskava kaže na to, da obstaja potreba po širšem pristopu k obvladovanju nasilja na delovnem mestu. Nekatere psihiatrične ustanove so že uspešno izvedle nekatere ukrepe na tem področju, kar dokazuje zmanjšanje števila agresivnih izbruhov. Po dodatni kvantitativni raziskavi, ki bi razkrila podrobne karakteristike in ozadje tovrstnega nasilja, bi bilo smiselno razviti podobne ukrepe tudi na področju zdravstvene nege v domovih starejših občanov.

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1 INTRODUCTION

Increased workplace violence towards health care professionals has already been reported [1-3]. Healthcare professionals encounter many medical risks while providing healthcare services to individuals and the community [4]. Healthcare workers (particularly nursing staff) are most frequently the object of psychiatric patients' violent behaviour. However, other employees working with those patients - police officers, security officers, paramedics and nursing home staff - also experience some degree of workplace violence [5]. In total, 35-80% of all healthcare employees experienced at least one physical assault at their workplace; whereby, the nursing staff is the most exposed group of all [5].

6.1 of injuries have been reported per 10,000 of health care employees, while the prevalence among other employees is much lower, 2.1 per 10.000 employees [6]. The reported prevalence of workplace injuries in the field of healthcare is high; however, the actual prevalence of injuries at workplace seems to be even higher, since many incidents remain unreported [6]. Up to 70% of incidents or cases of abuse towards the nursing staff remain unreported [7]. According to the Swedish study, the majority of the respondents (85%) reported to have been exposed to workplace violence at some point in their career, and 57% of respondents reported having been victimized in the past 12 months [8].

In 2013, an extensive study on the prevalence of workplace violence towards employees in psychiatric hospitals, psychiatric homes, nursing homes, and special education, work and care centres (SEWCC) was conducted in Slovenia [9]. Altogether, 92.6% of respondents reported to have experienced aggressive verbal behaviour by their patients in the past 12 months. 84.2% of respondents were physically abused during that period and 63.5% of nursing staff has already suffered injuries, which were inflicted on them by their patients. In the past 12 months, 40.9% of staff were subjects of verbal abuse by patients' family members [9].

There are also few researches that were conducted for nursing homes alone. Aggressive behaviour poses not only a challenge, but also a burden for caregivers working in nursing homes. In the study conducted by Zeller and colleagues, 40% of the staff was exposed to workplace violence during the past year and 18% reported experiencing workplace violence on a daily basis [10]. A significantly higher number of employees working in nursing homes reported violent behaviour compared to employees working in different types of settings [10]. Physical violence was the most frequently (76%) reported type of violence. Helplessness, sadness, anger and feelings of insecurity were feelings most often experienced by staff faced with violent behaviour [11]. Physical aggression was more frequently present in nursing homes (83.9%)

of employees); whereas, verbal aggression was more common in psychiatric hospitals (96.7% of employees)[12]. In the United States, the highest incidence of workplace assault is observed among nursing assistants working in long-term healthcare settings [13]. 31% of the caregivers (n=120) were subjected to workplace violence in the last year, with physical violence as the most frequent type of violence [14]. All types of caregivers were exposed to workplace violence, and their reactions were commonly very emotional [14]. 34% of nursing assistants included in the study reported to have suffered physical injuries in the past year due to aggressive behaviour of nursing home residents. Nursing assistants employed in nursing homes with Alzheimer's care units were more likely to suffer these types of injuries, including bites [15].

The purpose of this research was to establish the prevalence of violence towards nursing staff in nursing homes in Slovenia.

2 METHODS

The empirical part of the study is based on quantitative, non-experimental research, with a questionnaire being used as the method for gathering data.

2.1 Participants

In Slovenia, 96 public and private nursing homes are operating in 10 geographical regions. A random sample of 3/4 of nursing homes in each region was included in the research. Questionnaires were sent to 72 nursing homes altogether, and each nursing home received 15 questionnaires that were randomly distributed among nursing staff. Questionnaires were randomly distributed among employees who were willing to participate in the study. Each participant could respond only once.

In total, 1,080 questionnaires were distributed to employees, whereas 527 (48.79%) were returned. The total number of respondents included 46 (8.7%) men and 481 (91.3%) women. The average age (\pm SD) of the respondents was 39.72 \pm 10.35. The oldest respondent was 60 years old, and the youngest 19 years old. Levels of education: secondary 441 (83.8%), graduate 71 (13.5%), postgraduate 14 (2.7%).

2.2 Procedures

The survey was conducted in April and May 2015. The participation was voluntary and the participants' anonymity was ensured. When necessary, the administration of the relevant institutions gave their consent to participation in the study. The poll was conducted in accordance with the Code of Ethics for Nurses and Nurse Assistants and the Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects.

2.3 Instruments and Data Analysis

The questionnaire was prepared after reviewing the literature on previous studies, different situations faced by employees in the event of outbursts of aggression, and the quality and safety of patient treatment [5, 6, 9, 11, 16, 20].

The questionnaire included 55 questions divided into five sets: (1) work and workplace related workplace violence; (2) work management; (3) the influence of different factors on patient safety and quality of patient care; (4) education and (5) demographics.

For research purposes, the questionnaire included "Risk management" as the dependent variable, whereas, the independent variables included the following: "the availability of supplies, a clear understanding of risks involved, the awareness about work-related errors, attention to measures for increased safety, attention to the importance of safety within the institution, handling violent outbursts, supervision, motivation and incentives for the personnel, sufficient number of employees, protocols in case of violent outbursts, reporting about unfortunate events, team work and support, measures for improvement".

A descriptive Likert scale was used (1 - strongly disagree; 2 - disagree; 3 - partly agree; 4 - agree; 5 - strongly agree). While developing the questionnaire, a focus group of post graduate nursing students (2nd cycle) was formed, whose remarks and suggestions were added into the questionnaire.

The data were analysed with descriptive statistics, correlation, the Kolmogorov-Smirnov test, Mann-Whitney U test and linear regression. The data were processed with the statistics program IBM SPSS v. 21.0 and IBM AMOS v. 21 with a p<0.05 level of significance. Compiled data were processed by means of descriptive statistics, correlation analysis, Kolmogorov-Smirnov test and Mann-Whitney U test and regression analysis.

The contents of the questionnaire proved valid and reliable, with a high enough degree [19, 21] of internal consistency (Cronbach Alpha minimum 0.82). The external validity of the questionnaire was evaluated through a focus group, prior to the data acquisition.

3 RESULTS

The percentage, types and frequency of workplace violence directed towards nursing staff working in nursing homes are shown in Table 1.

Table 1. Work and workplace violence (n=527) - the results of the study on violence of patients towards staff in Slovenian nursing homes in 2015.

Have you been exposed to verbal	YES = 378	71.7%	
abuse by patients at your workplace in the last year?	If so, hov	v often?	
iii tile tast year:	1-2x	170	
	3-5x	136	
	6-9x	18	
	10x<	54	
Have you been exposed to verbal	YES = 74	14%	
abuse by co-workers or superiors at your workplace during the last	If so, how often?		
your workplace during the last	1-2x	30	
	3-5x	30	
	6-9x	9	
	10x<	6	
Have you been exposed to sexual	YES = 186	35.5%	
harassment by patients at your	If so, how often		
workplace during the last year?	1-2x	154	
	3-5x	22	
	6-9x	8	
	10x<	5	
Have you been exposed to sexual	YES = 5	0.9%	
harassment by co-workers or superiors at your workplace during the last	If so, how often?		
at your workplace during the last	1-2x	4	
	3-5x	0	
	6-9x	1	
	10x<	0	
Have you been exposed to physical	YES = 336	63.8%	
violence by patients at your workplace during the last year?	If so, how ofter		
during the last year:	1-2x	148	
	3-5x	110	
	6-9x	21	
	10x<	22	
Have you been exposed to physical	YES = 5	0.9%	
violence by co-workers or superiors at your workplace during the last year?	If so, how often?		
, daring the tust year .	1-2x	2	
	3-5x	2	
	6-9x	1	
	10x<	0	
Have you ever been injured by a	YES = 194	36.8%	
patient at your workplace?	If so, hov	v often?	
	1-2x	171	
	3-5x	21	
	6-9x	1	

71.1% respondents reported having experienced verbal violence by their patients in the last year. 63.8% respondents reported having been physically abused in the last year, and 36.8% of all employees suffered injuries that were inflicted on them by their patients. 35.5% of respondents reported having been sexually harassed by their patients in the last year. One of 14 employees was subjected to verbal abuse by their superiors or colleagues. Emotions and conditions, which are experienced by employees during patients' aggressive behaviour, are summarised in Table 2.

Table 2. Employees dealing with certain emotions and states
- the results of the study on workplace violence of
patients towards staff in Slovenian nursing homes in
2015.

Claim	N	Min intensity	Max intensity	Mean intensity	Std. dev
Fear	520	1	5	3.50	1.29
Insecurity	515	1	5	3.41	1.13
Helplessness	514	1	5	3.33	1.19
Lack of training	511	1	5	2.95	1.34
Anger	513	1	5	1.92	1.01
Despair	511	1	5	3.16	1.46
Vulnerability	516	1	5	3.52	1.29
Lack of empathy by co-workers	513	1	5	1.93	.99
Lack of empathy by superiors	514	1	5	3.12	1.11

When faced with patients' aggressive behaviour, employees had most intensive feelings of vulnerability ($M\pm SD=3.52\pm 1.29$), fear ($M\pm SD=3.5\pm 1.29$) and insecurity ($M\pm SD=3.41\pm 1.13$). Less intensively felt were anger towards the patient ($M\pm SD=1.92\pm 1.01$) and lack of empathy by co-workers ($M\pm SD=1.93\pm 0.99$).

Furthermore, a correlation analysis for different types of workplace violence reported by the study participants was performed. A significant correlation was found between the following variables: verbal abuse by patients in the past year and physical violence by patients in the past year (r=0.701; p<0.01); verbal abuse by patients in the past year and workplace injury (r=0.401; p<0.01) (Figure 1).

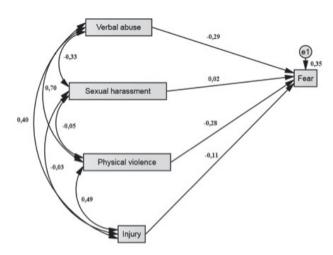


Figure 1. The correlation between individual variables defined in the study on workplace violence of patients towards staff in Slovenian nursing homes in 2015.

Variables of "verbal abuse", "physical violence" and "injury" explain 35% of variance for "fear". "Verbal abuse" and "physical violence" are significant predictor variables (Figure 1).

We stated different measures used by organisations to ensure safety during patients' aggressive outbursts, as well as the influence of other factors.

The respondents most favourably evaluated the following statements: "Only a sufficient number of employees can ensure a 24-hour monitoring and detection of potential risks (M±SD=4.3±0.96)" and "Conflicts among team members can affect the safety and quality of patient care (M±SD=4.5±1.01)". The following statement was the least favourably evaluated: "I receive sufficient motivation and incentives to perform my work in a quality and safe manner (M±SD=2.11±1.11)".

We were interested in the employees' opinions about their own knowledge and education on aggression management. The employees neither agreed nor disagreed that their knowledge on patient aggression management was sufficient ($M\pm SD=2.79\pm 1.00$), whereas they placed most emphasis to multiple revision workshops ($M\pm SD=4.23\pm 0.79$) and practical workshops ($M\pm SD=4.2\pm 0.80$), as well as written guidelines ($M\pm SD=4.16\pm 0.82$).

Our research shows statistically significant differences in experiencing fear among the employees, who were subjected to physical abuse and also verbal abuse by their patients in the past year at their workplace. Employees who had already been a target of physical violence more often believed that they possessed insufficient knowledge to manage an aggressive patient.

4 DISCUSSION

The aim of this research was to identify the frequency and intensity of workplace violence towards the nursing staff. For the purposes of this research, a non-experimental quantitative method with a structured questionnaire was used for data collection. The method proved to be appropriate and the aim was achieved.

The nursing staffs in nursing homes for senior citizens are at high risk of violence. During aggressive outbursts of nursing home residents, employees particularly experience vulnerability, fear and insecurity.

According to our research, 71.1% of respondents reported having experienced verbal violence by their patients in the last year. 63.8% of respondents reported having been physically abused in the last year, and 36.8% of all employees suffered injuries that were inflicted on them by their patients (Table 1). In addition, 35.5% respondents reported having been sexually harassed by their patients in the last year (Table 1).

Compared to other research conducted in nursing homes, different levels of physical violence were reported: 76% [11], 31% [14] and 83% [12]. The proportion of those exposed to workplace violence by psychiatric patients is slightly higher: 85% [8], 70% [7]. The research conducted in general hospitals shows that, in the past 12 months, 72% of nursing staff experienced verbal violence, whereas 42% of nursing staff experienced physical violence from both patients and visitors [16]. The nursing staff experienced a lot of distress due to violent behaviour by both patients and visitors [16].

A statistically significant correlation was established between verbal and physical violence, as well as verbal violence and workplace injuries (Figure 1). This has already been established in the research entitled "Different types of violent behaviour are not independent from each other, but are interconnected in a way that the presence of one type of violent behaviour (e.g. verbal abuse) may trigger the occurrence of another (e.g. sexual harassment) [9]. In 2003, an extensive research on violence towards psychiatric health care employees was conducted by using the same research methodology [9]. It was established that the prevalence of verbal and physical violence in the psychiatric health care facilities is 20% higher compared to nursing homes, which is nevertheless a cause of concern. Verbal violence (92.6% - psychiatric health care; 71.7% nursing home health care) and physical violence (84.2% - psychiatric health care; 63.8% - nursing home health care). The research conducted in nursing homes showed a higher proportion of sexual violence; 35.5% of employees in nursing home health care and 24.6% in psychiatric health care. This high proportion is also reflected in the employee structure (nursing homes: 91.3% of women; psychiatric health care facilities: 53.2%).

The results of the study can serve as the basis for the development of a comprehensive prevention of aggression and employee training programme, which is adjusted for nursing home settings (nursing homes, long-term care, etc.), as suggested and implemented in psychiatric health care facilities, where preliminary results of the comprehensive management model show a high performance level [17].

The institution can influence the establishment of safety culture within the organisation by creating systematic training models, taking necessary precautions to ensure safety and preparing a protocol used in the event of violent outbursts [18].

This study is subject to limitations. First, due to the selected sampling technique. Second, another common limitation, as with most studies on a similar topic, is the reliance on self-reports.

5 CONCLUSIONS

The results of this study are in agreement with other studies that show the exposure of nursing staff towards workplace violence. The research enlightens the area of violence towards the employees in health care in nursing homes, which has been rarely researched up until now.

According to frequent and intensive workplace violence incidences, the employees need a comprehensive approach to tackle any form of workplace violence towards nursing staff. Such an approach has already been adopted by some psychiatric health care facilities in order to ensure safe and high-quality management of residents' aggressive outbursts. To get a comprehensive picture on workplace violence in health care facilities, the research should be extended to somatic branches of healthcare.

In order to determine the range of problems, it would be useful to conduct a survey with the same methodology on other aspects of healthcare, as well as an intensified study with qualitative methodology, which would expose the characteristics and background manifestation of such violence.

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CONFLICTS OF INTEREST

The authors declare that no conflicts of interest exist.

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ETHICAL APPROVAL

The study was conducted in accordance with the Code of Ethics for Nurses and Nurse Assistants and the Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects.

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