journal homepage: http://kont.zsf.jcu.cz
DOI: 10.32725/kont.2018.008

KONTAKT / Journal of nursing and social sciences related to health and illness

Original research article

Patient safety culture from a nursing point of view in a broader context

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Abstract
The research aimed to demonstrate a broader context in the assessment of patient safety culture and its subsequent application to the selected sample of nurses. Foreign research shows that there is a relationship between the evaluation of particular patient safety culture dimensions and socio-demographic data. It was found that between the dependent (overall perception of patient safety and frequency of events reported) and independent variables of patient safety culture dimensions it is possible to ratify the statistically significant relationship. To reveal the predicted context, the standardized questionnaire of Agency for Healthcare Research and Quality (AHRQ) was used and also validated in the Czech language. 207 respondents participated in the research study. The whole questionnaire was evaluated for reliability using Cronbach α with a score of 0.877. The composite score required to determine the particular dimensions was first calculated using AHRQ's methodological procedures. Within our research, we have demonstrated by computed dimensions the correlation between socio-demographic data (i.e., length of the practice in the hospital, length of practice in the current hospital work area/unit and length of practice in the current profession or specialist field) and some dimensions of patient safety culture. The results showed that, in proportion to the length of practice, the level in some dimensions also increased. Through the multidimensional linear regression it was confirmed that dependent variables in dimensions of patient safety culture (overall perception of patient safety and frequency of events reported) are significantly associated with other independent variables of dimensions. The quality of the model used was assessed by determination coefficient, which confirmed this relationship as causative. The results are beneficial to the hospital management from the perspective of targeted activities leading to the improvement of overall perception of patient safety and the frequency of events reported.

Keywords: Hospital Survey on Patient Safety; Nursing care; Patient safety; Patient safety culture; Questionnaire

Introduction

Patient safety is the basis for providing health care (Ulrich and Kear, 2014). Over the past 15 years, it has become increasingly important since, according to the World Health Organization (WHO), this is a serious global problem (Kear and Ulrich, 2015). The Agency for Health Research and Quality (AHRQ) defines patient safety as "relief from accidental or avoidable injuries produced by health care" (Hughes, 2008). It is considered a global necessity, which has far-reaching consequences for all WHO Member States, for all healthcare workers and for all who may become patients (Stavrianopoulos, 2012). An ideal strategy for enhancing patient safety appears to be the introduction of a safety culture into healthcare facilities, the construction of which is recommended by the Institute of Medicine (Ammouri et al., 2015; Kalvachová, 2011). According to AHRQ, the patient's safety culture is defined as "a product of individual and group values, attitudes, perceptions, competencies and patterns of behavior that determine the link of the organization, its style and expertise, but also the health and safety of leadership" (Sorra et al., 2016). The authors Ulrich and Kear (2014) further conclude that a safety culture represents "the values shared among the members of the organization, determining what is important, and the belief of these members about how things work in the organization. Interaction of team members, organizational structures, and systems that together produce the standards of organizational behavior contribute to overall security enhancement." While according to Sammer et al. (2010) defining safety culture is not so complicated; the knowledge and understanding of the characteristics that define and integrate it into healthcare organizations can prove to be more difficult. In order to establish a culture of patient safety in healthcare facilities, AHRQ is required to evaluate a total of twelve dimensions of this culture (Occelli et al., 2013). Ten of them are defined as independent

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http://doi.org/10.32725/kont.2018.008
Submitted: 2018-06-06 • Accepted: 2018-11-06 • Prepublished online: 2019-01-15
KONTAKT 21/2: 121–127 • EISSN 1804-7122 • ISSN 1212-4117

variables and include management support for patient safety, organizational learning and continuous improvement, teamwork within units, communication openness, feedback and communication about error, nonpunitive response to errors, staffing, supervisor/manager expectations and actions promoting patient safety, teamwork across units, handoffs and transitions. Two dimensions are defined as dependent variables and include the overall perception of patient safety and the frequency of events reported (Robida, 2013). The overall assessment of patient safety culture is complemented by the overall perception of patient safety and the number of events reported.

According to previous studies it has been determined that between the selected socio-demographic data of respondents and the individual dimensions of safety culture, a predicted relationship can be confirmed (Bahrami et al., 2014). In addition, it has been revealed that a statistically significant relationship exists between dependent and independent variable dimensions (Ammouri et al., 2015; Ballangrud et al., 2012; El-Jardali et al., 2014; Sováriová Soósová et al., 2017). These associations can then contribute to the overall improvement of patient safety (Ammouri et al., 2015). The quality and safety of care are both essential to the improvement of nursing care in general (You et al., 2013). Nurses play an important role in improving healthcare and are essential in terms of finding innovative solutions to improve patient safety. The occupation of being a nurse includes many functions, including providing effective and safe care, monitoring quality indicators, and even risk assessment. In doing so, they can actively participate in effective security solutions that can positively affect the outcome of the care for a patient. Among these things, nurses spend the most time with the patient of all healthcare professionals (Ammouri et al., 2015; Stavrianopoulos, 2012) and their perception of safety procedures is therefore considered to be very important (Listyowardojo et al., 2012). This research focuses on perceiving a nursing culture in terms of nursing patients and assessing it on the basis of earlier studies to demonstrate the issue in wider contexts.

Materials and methods

A standardized questionnaire, The Hospital Survey on Patient Safety Culture (HSOPSC), was used to assess the perception of a safety culture by nurses according to the AHRQ methodology (Sorra et al., 2016). In the framework of this research study, the questionnaire was validated in Czech after obtaining the required translation consent and its subsequent distribution from the AHRQ in connection with the modified linguistic validation procedure as according to Wild et al. (2005). The validation process took place from June 2015 to October 2015. The research was also approved by the Ethics Committee. The questionnaire is intended for all institutions to assess the culture of patient safety in regard to all healthcare workers, but it can be used only by choosing a subset of employees (e.g., nurses). However, in the evaluation of one category, research is valid only for the given category (Sorra et al., 2016). It is primarily intended to enable institutions to assess and identify the strengths and weaknesses of safety culture in providing safe care (Ulrich and Kear, 2014). However, not only these areas of safe care can be revealed by a questionnaire. It is possible to work with the given dimensions to obtain more information and thus to find wider contexts on the given issue (Ammouri et al., 2015). However, the description of these connections has not been given due attention in the Czech Republic in the context of research. The introduction of the questionnaire includes instructions on how to fill it out and explains the concepts of "adverse event" and "patient safety" to enable better orientation for the respondent on a given issue. It is grouped into 9 units (*A–I*). The main part of the questionnaire (*A–D, F*) reflects a total of 12 dimensions of patient safety culture and 2 assigned items to evaluate patient safety grade (*E*) and to detect the number of events reported (*G*). Other sections deal with the socio-demographic data of the respondents (*H*, Table 1) and provide the possibility of commenting on the issue (*I*).

Table 1. Socio-demographic data of respondents

Part H		Number	Percent
Length of hospital practice	less than 1 year	26	12.6%
	1–5 years	60	29.0%
	6–10 years	51	24.6%
	11–15 years	32	15.5%
	16–20 years	20	9.7%
	21 years or more	18	8.7%
Length of practice in the current hospital work area/unit	less than 1 year	36	17.4%
	1–5 years	66	31.9%
	6–10 years	56	27.1%
	11–15 years	28	13.5%
	16–20 years	9	4.3%
	21 years or more	12	5.8%
Weekly working hours	less than 20 hours per week	2	1.0%
	20–39 hours per week	62	30.0%
	40–59 hours per week	121	58.5%
	60–79 hours per week	20	9.7%
	80–99 hours per week	2	1.0%
	100 hours per week or more	0	0.0%
Direct contact with patients	yes	207	100.0%
	no	0	0.0%
Length of practice in the current profession or specialist field	less than 1 year	16	7.7%
	1–5 years	41	19.8%
	6–10 years	44	21.3%
	11–15 years	41	19.8%
	16–20 years	22	10.6%
	21 years or more	43	20.8%

As part of our research, part A was modified to offer only workplaces with an internal focus, because of our preference of focusing on the nursing area of interest we also deviated from focusing on the work area in question (part *H*) and gave the respondents the choice of choosing between only two areas of interest. These were: general nurse and health care assistant. Questionnaires filled in by health care assistants (29 in total) were subsequently excluded from the survey to address only the target group of respondents. Another 14 questionnaires were rejected for incompleteness, 49 questionnaires were not returned. From the total number of 299 questionnaires handed out, 207 were to nurses working within one university hospital in the Czech Republic which all were included in the research survey (response rate 69.23%). Through cooperation with

head nurses, the total number of respondents was identified prior to the start of the research. The research could address all nurses employed in internal workplaces. Empirical data collection took place from November 2015 to January 2016. A total of 9 inpatient wards were addressed, including the Intensive Care Unit (About AHRQ, 2015). The items in the questionnaire were described by individual parts *A–G* using absolute and relative frequencies. Response options were offered within the five-step Likert scale (strongly disagree/strongly agree, or never/always). The items forming the core of the questionnaire (part *A–D, F*) were grouped into individual dimensions of patient safety culture. For each dimension, according to AHRQ recommendations, so-called composite scores were calculated. These represent the average percentage of respondents who responded positively to questions assessing each given dimension of patient safety culture. Items in the questionnaire marked with an asterisk are referred to as "negative", and the negative averaging counts must be transcribed (About AHRQ, 2015; Sorra et al., 2016) to obtain only positive responses on the above-mentioned scale before an assessment can be made. Based on previous studies conducted by the nurses from Iran, Oman, Sweden, Saudi Arabia and Slovakia, a statistically significant relationship between socio-demographic data and the dimensions of the patient safety culture can be expected (Bahrami et al., 2014) and the relationship between dependent variable dimensions and independent variable dimensions (Ammouri et al., 2015; Ballangrud et al., 2012; El-Jardali et al., 2014; Sováriová Soósová et al., 2017), can be considered the main purpose of our research. To verify the prediction of there being a relationship between the socio-demographic data and the individual dimensions of the patient safety culture, the Spearman's correlation coefficient was determined with the determination of the corresponding p-value. A multidimensional linear regression was used to determine the statistical linear relationship of dependent variable dimensions (the overall perception of patient safety and the frequency of events reported) to independent variable dimensions. Statistical processing was performed at a significance level of 0.05 using IBM SPSS Statistics 23 software.

Results

The strongest dimension of safe care provided by our respondents was teamwork within units (84.2%) and the weakest was the frequency of events reported (46.7%). The assigned questionnaire entries (part *E, G*) were then captured as a percentage. 83.6% of respondents evaluated the safety of patients to be positive overall (excellent/very good) At least one undesirable event was reported in 78.7% of the cases. Despite the fact that nearly 80% of nurses reported at least one undesirable event in the last 12 months, the frequency of the reporting of adverse events was considered to be a weak area of safe care provision. However, the reason for this could be that the items were also concerned with the errors that had not happened, which is not even considered in the Czech Republic (Škrla and Škrlová, 2008). In regards to the prediction of there being a relationship between sociodemographic data of respondents and dimensions of patient safety culture, a statistically significant positive correlation has been confirmed. The positive correlation found by us revealed, in particular, that there was a relationship between the length of hospital practice and the nonpunitive response to errors ($p = 0.002$), feedback and communication about error ($p = 0.002$) and management support for patient safety ($p = 0.047$). Furthermore, relationships between the following were discovered; length of practice in the current hospital work area/unit with nonpunitive response to errors ($p = 0.006$) and feedback and communication about error ($p = 0.004$) and also the continuity of the length of practice in the current profession or specialist field with the organizational learning and continuous improvement ($p = 0.017$), feedback and communication about error ($p = 0.001$), and the frequency of events reported ($p = 0.003$). All correlation coefficients were positive, which means that the level in the given dimensions (Table 2) increased in proportion to the length of the practice in the hospital, in the hospital work area/unit or in the current profession or specialist field. The relationship of weekly working hours and other areas within each individual dimension of patient safety culture was not demonstrated ($p \leq 0.05$).

Multidimensional linear regression can be aspired to, confirming the predicted relationship between independent and dependent variable dimensions (the overall perception of patient safety and the frequency of events reported). In our research, nurses of internal disciplines have shown a higher overall perception of patient safety when they have a positive perception of staffing ($\beta = 0.243$, $p = 0.0001$), teamwork within the units ($\beta = 0.139$, $p = 0.036$), supervisor/manager expectations and actions promoting patient safety ($\beta = 0.147$, $p = 0.039$), management support for patient safety ($\beta = 0.132$, $p = 0.041$) and organizational learning and continuous improvement ($\beta = 0.153$, $p = 0.049$). Higher ratings in the frequency of events reported were reported if there was good feedback and communication about error ($\beta = 0.357$, $p = 0.011$), organizational learning and continuous improvement ($\beta = 0.368$, $p = 0.033$). The quality of this model was assessed by the coefficient of variability: the dependent variable in variability with all independent variables ($R^2 = 0.340$ for the dimension overall perception of patient safety, $R^2 = 0.072$ for the dimension frequency of events reported). There were no other significant dependencies to be found in our research (Table 3).

Discussion

Assessing the individual dimensions of patient safety culture can be judged on the safety of the care provided. Questionnaires measuring patient safety in health organizations for benchmarking, diagnosis, planning and improving the quality of the organizations have been developed and used by several of them. According to Al Doweri et al. (2015), a total of thirteen have been found. These questionnaires include a total of 23 dimensions of patient safety culture that are grouped into broad categories. Due to its validity and reliability, the "Hospital Survey on Patient Safety" (Al Doweri et al., 2015; Davoodi et al., 2013; Morello et al., 2012; Ulrich and Kear, 2014), was chosen as the most suitable. The acceptable level of intrinsic consistency (reliability) was determined by AHRQ in 2016 at a significance level of >0.60, which was achieved in our research with the $\alpha = 0.877$ (2016 National Healthcare Quality and Disparities Report, 2017). A number of studies have been carried out to assess the culture of patient safety as recommended by AHRQ. In the Czech Republic it was mainly addressed in hospitals of the South Bohemian Region by Filka and Kotrbová (2012), and in Slovakia by Mikušová and Rusnáková (2012). Among other things these particular problems were analyzed in many diploma and bachelor theses. Personnel security as a necessary part of the safety culture in healthcare facilities was published in 2018 by Pokojová and Bártlová (2018). However, the difficulty with finding further wider contexts in assessing

Table 2. Relationship between socio-demographic data and individual dimensions considered

		Length of hospital practice	Length of practice in the current hospital work area/unit	Weekly working hours	Length of practice in the current profession or specialist field
Teamwork within units	Correlation coefficient	0.085	0.082	0.058	–0.027
	p-value	0.221	0.242	0.406	0.697
Organizational learning and continuous improvement	Correlation coefficient	0.094	0.023	–0.018	0.165
	p-value	0.177	0.740	0.797	0.017
Overall perception of patient safety	Correlation coefficient	0.018	–0.007	0.006	–0.013
	p-value	0.792	0.916	0.936	0.858
Staffing	Correlation coefficient	0.010	–0.113	0.013	0.057
	p-value	0.882	0.104	0.855	0.418
Nonpunitive response to errors	Correlation coefficient	0.214	0.192	0.044	0.126
	p-value	0.002	0.006	0.526	0.070
Supervisor/manager expectations & actions promoting patient safety	Correlation coefficient	0.107	0.008	-0.068	0.063
	p-value	0.126	0.913	0.327	0.369
Feedback and communication about error	Correlation coefficient	0.217	0.200	0.096	0.224
	p-value	0.002	0.004	0.168	0.001
Communication openness	Correlation coefficient	0.128	0.101	0.070	0.099
	p-value	0.065	0.147	0.319	0.155
Frequency of events reported	Correlation coefficient	0.036	0.024	0.009	0.202
	p-value	0.604	0.732	0.893	0.003
Management support for patient safety	Correlation coefficient	0.138	0.046	–0.020	0.088
	p-value	0.047	0.513	0.777	0.209
Teamwork across units	Correlation coefficient	–0.029	–0.038	–0.081	0.015
	p-value	0.676	0.591	0.249	0.826
Handoffs and transitions	Correlation coefficient	–0.010	–0.100	–0.065	0.051
	p-value	0.886	0.152	0.355	0.462

Table 3. Multidimensional linear regression of the relationship of dependent variable dimensions to independent variable dimensions of patient safety culture

	Overall perception of patient safety[a]			Frequency of events reported[b]		
Independent variable dimensions	β	*t*-value	*p*-value	β	*t*-value	*p*-value
Supervisor/manager expectations & actions promoting patient safety	0.147	2.074	0.039	–0,115	–0.732	0.465
Organizational learning and continuous improvement	0.153	1.984	0.049	0.368	2.153	0.033
Teamwork within units	0.139	2.108	0.036	0.099	0.680	0.497
Non-punitive response to error	0.034	0.574	0.567	–0.107	–0.813	0.417
Staffing	0.243	3.948	0.0001	0.025	0.186	0.853
Management support for patient safety	0.132	2.062	0.041	–0.064	–0.453	0.651
Teamwork across units	–0.029	–0.475	0.635	0.096	0.711	0.478
Handoffs and transitions	0.046	0.874	0.383	0.163	1.413	0.159
Communication openness	–0.032	–0.491	0.624	–0.107	–0.739	0.461
Feedback and communication about error	0.035	0.564	0.574	0.357	2.563	0.011

Explanatory notes: [a] F (10, 196) = 11.615, $p < 0.0001$, $R^2 = 0.340$; [b] F (10, 196) = 2.607, $p = 0.005$, $R^2 = 0.072$.

patient safety culture in the Czech Republic has not yet been resolved. One possibility of discovering these wider contexts is, according to Bahrami et al. (2014), to demonstrate the relationship between the different dimensions of patient safety culture and the socio-demographic data of the respondents. Our research has shown that data on the length of hospital practice, length of practice in the current hospital work area/unit and length of practice in the current profession or specialist field correlated with some dimensions of patient safety culture. When comparing the results of our research with a single similarly designed research conducted by nurses in Iran, we find that there is consistency between the length of practice in the current hospital work area/unit with dimensions describing nonpunitive response to errors (p = 0.03; in our research = 0.006) and feedback and communication about error (p = 0.04, in our research p = 0.004). In their research, the relationship between the length of practice in the current hospital work area/unit and teamwork within units and communication openness has also been identified. Relationships between other types of socio-demographic data and different dimensions of patient safety culture have also been determined here, but the results have not been consistent with those of our research (Bahrami et al., 2014).

Another alternative to revealing a wider context is the possibility of confirming the relationship between dependent variable dimensions – the overall perception of patient safety and the frequency of events reported – to independent variable dimensions. In previous studies conducted by Ammouri et al. (2015); Ballangrud et al. (2012); El-Jardali et al. (2014) and Sováriova Soósová et al. (2017) a statistically significant relationship was established between these variables.

By analysing the results of our work, it was found that the dependent variable dimension – the overall perception of patient safety – was significantly associated with two independent variables of patient safety culture, with the supervisor/manager expectations and actions promoting patient safety and teamwork (Ammouri et al., 2015; Ballangrud et al., 2012; Sováriová Soósová et al., 2017). Ammouri et al. (2015) who conducted research on nurses in Oman's four hospitals, found a relationship between the overall perception of patient safety with feedback, communication about error (β = 0.394) and handoffs and transitions (β^2 = 0.224). Effective communication and teamwork are crucial to improving patient safety, as has been confirmed by other studies. Sováriová Soósová et al. (2017) made a regressive analysis of Slovakia using only a dependent variable concerned with the overall perception of patient safety. They concluded that there was a relationship between the amount of people available to do the job and the variable mentioned above (staffing β = 0.094, in our research β = 0.243). Research from Ammouri et al. (2015) shows the importance of supervisor/manager expectations and actions promoting patient safety (β = 0.280, in our research β = 0.147). Above all, it points out that if we want to ensure safe care, a very important role is played by both staffing and support of supervisors/managers who will be able to identify and enforce their behavioral expectations that are needed to ensure patient safety. Within dependent variable dimension – the frequency of events reported – the relationship between the independent dimension variables (feedback and communication about error) was confirmed not only in our study (β = 0.357) but also in other studies (Ammouri et al., 2015; Ballangrud et al., 2012; El-Jardali et al., 2014). Ammouri et al. (2015) also found the relationship between this dependent variable dimension and teamwork within units (β = 0.208). Research of Ballangrud et al. (2012) conducted on nurses working in intensive care departments showed this relationship between supervisor/manager expectations and actions promoting patient safety (β = 0.160), and in our study a relationship between organizational learning and continuous improvement (β = 0.368) was discovered. Therefore, it can be argued that feedback and communication about error are referred to as predictors of an increase of reported undesirable events by nurses. According to The Joint Commission, roughly 80% of undesirable events are caused by inadequate communication, so it is necessary to focus on this area when there is a necessity to increase the number of reported adverse events (Ulrich and Kear, 2014). The quality of the linear regression model was assessed by the determinant factor (for dimension the overall perception of patient safety was R^2 = 0.340, for dimension the frequency of events reported was R^2 = 0.072). It is comparable to Ammouri et al. (2015) when assessing the overall perception of patient safety (R^2 = 0.350) and the frequency of events reported (R^2 = 0.096).

Limitations

The results have relatively low ecological validity due to the realization of the research in only one facility and a low population reliability in relation to the homogeneous sample of respondents. This gives an overall low external validity, i.e., general validity and portability of research results. However, internal validity may be beneficial for workplace management, so it is desirable that more research be carried out in the future in view of the innovative possibilities of assessing patient safety culture in a broader context.

Conclusions

In this research study, we focused on assessing patient safety culture through a sufficient sample of nurses to ensure internal validity of research results in a broader context. The relationship between dependent (the overall perception of patient safety and the frequency of events reported) and independent variable dimensions of patient safety culture was investigated. In particular, one hospital's internal workplaces showed that a higher level of the overall perception of patient safety was reported when nurses positively perceived staffing, teamwork within units, supervisor/manager expectations and actions promoting patient safety, management support for patient safety and organizational learning and continuous improvement. A higher frequency of events reported has been identified in instances when feedback and communication about error has been accepted, and organizational learning and continuous improvement has been ensured. It was also found that, depending on the length of practice, either in the hospital, the current hospital work area/unit or the current profession or specialist field, the assessment in the individual dimensions of the patient safety culture increases. This means that in our research, nurses with longer practice have been more proficient in some areas of patient safety culture assessment and in some cases less.

The main objective of hospital management should be to achieve improvements in those areas that have been identified as less then suitable. In workplaces that have a higher number of nurses with shorter working hours, they should also focus on the remaining identified dimensions of patient safety culture. If the hospitals were then interested in finding out how to improve the areas pertaining to the overall perception of patient safety and the frequency of events reported not only at internal workplaces, they could begin to evaluate the rela-

tionships between dependent and independent variable dimensions of patient safety culture throughout the hospital. These areas could then be influenced by hospital management, and progress could be monitored through regular evaluations, which could lead to overall improvements in the provision of safe patient care. Since the "Hospital Patient Safety Survey" tool is not commonly used in our country and research has not yet been conducted to look for broader connections in reference to this issue, further research is needed – not only at internal workplaces but across the Czech Republic to prove its appropriateness validity and visibility.

Conflict of interests

The authors have no conflict of interests to disclose.

Kultura bezpečnosti pacientů z pohledu sester v širších souvislostech

Souhrn

Cílem výzkumného šetření bylo prokázání širších souvislostí při posuzování kultury bezpečí pacientů a jejich následná aplikace na námi vybraný výzkumný vzorek sester. Zahraniční výzkumy dokazují, že existuje vztah mezi hodnocením jednotlivých dimenzí kultury bezpečnosti pacientů a sociodemografickými údaji. Bylo dohledáno, že mezi závislými (celkové vnímání bezpečnosti pacientů a frekvence hlášení nežádoucích událostí) a nezávislými proměnnými dimenzemi kultury bezpečí pacientů lze rovněž statisticky významný vztah ratifikovat. K odhalení predikovaných souvislostí byl využit standardizovaný dotazník společnosti AHRQ (Agency for Healthcare Research and Quality) „The Hospital Survey on Patient Safety" (HSOPSC), který byl validizován do českého jazyka. Dotazníkového šetření se zúčastnilo 207 respondentů. Celý dotazník byl posouzen z hlediska reliability za pomoci Cronbach α s výsledkem 0,877. Kompozitní skóre nutné ke stanovení jednotlivých dimenzí bylo předem vypočteno prostřednictvím metodologických postupů společnosti AHRQ. V rámci našeho výzkumu byla za pomoci předem vypočtených dimenzí prostřednictvím korelace prokázána souvislost mezi sociodemografickými údaji (tj. délkou praxe v nemocnici, délkou praxe na současném oddělení a délkou praxe v současné specializaci/profesi) a některými dimenzemi kultury bezpečí pacientů. Výsledky poukázaly na to, že úměrně k délce praxe se zvyšovala i úroveň v některých dimenzích. Prostřednictvím vícerozměrné lineární regrese bylo potvrzeno, že závislé proměnné dimenze kultury bezpečí pacientů (celkové vnímání bezpečnosti pacientů a frekvence hlášení nežádoucích událostí) jsou významně asociovány s ostatními nezávislými proměnnými dimenzemi. Kvalita využitého modelu byla posouzena koeficientem determinace, jenž potvrdil tento vztah jako příčinný. Výsledky jsou přínosem pro management nemocnice z pohledu cíleného směřování aktivit vedoucích ke zlepšení celkového vnímání bezpečnosti pacientů a k frekvenci hlášení nežádoucích událostí.

Klíčová slova: bezpečnost pacientů; dotazník; kultura bezpečí pacientů; nemocniční průzkum bezpečnosti pacientů; ošetřovatelská péče

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