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## Anxiety levels in employees and students in psychiatric nursing

Proučevanje anksioznosti pri zaposlenih in študentih na področju zdravstvene nege v psihiatriji

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**Key words:** stress; burnout; nurses; health care

**Ključne besede:** stres; izgorelost; medicinske sestre; zdravstvo

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### ABSTRACT

**Introduction:** Several research findings indicate that nursing care professionals are often faced with situations which may lead to anxiety. The aim of the present research was to determine the prevalence and typical signs of anxiety among nursing employees and nursing students in psychiatric settings.

**Methods:** The Burns Anxiety Inventory was used as an assessment tool to measure anxiety. The research sample consisted of 242 participants. The data collected were processed by the descriptive statistics, Levene's test, the ANOVA statistical test, the Welch's t-test, and the post hoc analysis. Pearson's correlation coefficient was used to measure the strength of the association between the variables.

**Results:** The results of the current study show that nearly half of the participants experience anxiety, but the differences were noted as regards their anxiety thoughts ( $p = 0.039$ ). Anxiety feelings are more prevalent in female students ( $p = 0.046$ ). Habitual smokers ( $p = 0.030$ ) and casual smokers ( $p = 0.020$ ) are more likely to develop anxious feelings and physical signs of anxiety. The anxiety signs are also more pronounced in the respondents with self-assessed lower economic status ( $p = 0.001$ ) and poor self-rated health ( $p = 0.0001$ ).

**Discussion and conclusion:** The professionals and students in psychiatric nursing often encounter situations conducive to the development of anxiety. Further studies on the current topic are therefore recommended to design adequate educational programmes to timely recognise anxiety symptoms and to implement mutual and self-help measures.

### IZVLEČEK

**Uvod:** Raziskano je, da se zaposleni v zdravstveni negi pogosto srečujejo z dejavniki za razvoj anksioznosti. Namen raziskave je bil ugotoviti pojavnost znakov anksioznosti med zaposlenimi na področju zdravstvene nege v psihiatriji in med študenti zdravstvene nege.

**Metode:** Za raziskavo je bil uporabljen Burnsov kontrolni seznam anksioznosti. Sodelovalo je 242 anketirancev. Podatki so bili obdelani z uporabo deskriptivne statistike, Levenovega testa, ANOVE, Welchovega testa, analizo Post Hoc in Pearsonovo korelacijo.

**Rezultati:** Ugotovljeno je bilo, da se zaposleni in študenti srečujejo z znaki anksioznosti, med seboj se razlikujejo pri anksioznih mislih ( $p = 0,039$ ). Med študenti ženskega spola se v večji meri pojavljajo anksiozna občutja ( $p = 0,046$ ). Anketiranci, ki kadijo redno ( $p = 0,030$ ) ali občasno ( $p = 0,020$ ), so bolj dovzetni za anksiozna občutja in telesne znake anksioznosti. Anketiranci, ki svoj ekonomski položaj ( $p = 0,001$ ) in zdravje ( $p = 0,0001$ ) zaznavajo slabše, bolj občutijo znake anksioznosti.

**Diskusija in zaključek:** Zaposleni in študenti se pri svojem delu ter kliničnem usposabljanju pogosto srečujejo z dejavniki, ki povzročajo pojavnost anksioznosti. Potrebne bi bile nadaljnje raziskave, predvsem pa bi bilo treba izobraziti zaposlene in študente, da prepoznajo znake ter si tako pomagajo pri premagovanju le-teh.

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## Introduction

Stress at home and work-related stress are known to cause several types of anxiety (Gomboc, 2010). Various studies have demonstrated that nursing is stressful and that the prevalence of occupational stress-related burnout in the profession is high (Bégar, et al., 2005; Hegney, et al., 2014). According to Karanikola and Papatheanassoglou (2013) up to 10 % of nurses manifest clinically significant anxiety and depressive symptoms leading to altered professional attitudes.

A cross-sectional survey conducted by Gao and colleagues (2012) among 1807 registered nurses in seven public city general hospitals in China identified the key factors causing anxiety symptoms in nurses, including not highly valued work, chronic diseases, worse nurse-patient relationships and relatively low social status of nurses. The results of the study suggest that proper counselling, promotion of healthy lifestyle behaviour and improvements to the social environment in the workplace may be helpful toward reducing or preventing the anxiety symptoms. Another important finding was that a large proportion of nurses had anxiety symptoms (43.4 %), which warrants immediate investigation and intervention from the hospital administrators. These results are consistent with those demonstrated by Taghinejad and colleagues (2014), who ascertained that nurses experience mental problems among which anxiety is the most common.

Different types of work schedule and working environment may contribute to the development of anxiety symptoms. Shift work, especially during the night, was proved to be significantly associated with anxiety in medical and nursing employees. The prevalence rates of anxiety symptoms among the nurses were higher than among the referent population (Ardekani, et al., 2008; Melo, et al., 2010). The intensive care unit is a stressful environment especially for nurses and physicians and these stresses may have negative effects on their mental health and performance (Nooryan, et al., 2012). Stathopoulou and colleagues (2011) provided evidence of the correlation between the extent of workplace stress and subsequent anxiety symptoms in emergency nursing personnel. Contrary to these findings, the results of quantitative surveys conducted by Peters and colleagues (2013) suggested that the level of anxiety of nurses working in hospice care or in community services was not high. The recent research investigating the influence of gender on the development of anxiety demonstrated that anxiety levels were significantly higher in females than males (Kayalha, et al., 2013).

In a study conducted in seven city hospitals in China, 75 % of 1807 employees were included in the survey. It was established that the prevalence of anxiety symptoms in nurses was 43 %. Several factors,

such as education, chronic disease, regular meals and physical activity, hospital grade, job rank, monthly salary, nurse-patient relationships, job satisfaction and others were all statistically significantly related to the prevalence of anxiety symptoms (Gao, et al., 2012).

These results accord with the observations of Mark & Smith (2012), who also provided evidence that social support, rewards, and skill discretion are negatively associated with mental health problems. Huang and colleagues (2013) conducted a prospective, randomized control study which documented a positive impact of different light exposure during night shift on the nurses' symptoms of clinical insomnia and subsequent anxiety, and depression. In nursing, rotating shifts are common and due to the nature of work the necessary rest periods between shifts can be shorter than stipulated by the health and safety legislation (12 hours). However, no association between the frequency of work shifts separated by less than 11 hours and excessive anxiety or depression was established (Flo, et al., 2014).

### *Aim and objectives*

As a sequel to the literature review and recent research (Selič, 2010; Gao, et al., 2012), the study aimed to determine the prevalence of anxiety and anxiety symptoms in psychiatric nurses and the third-year nursing students of the Faculty of Health Care Jesenice during their clinical practice in psychiatric settings.

The research questions:

- What is the prevalence of anxiety symptoms among nurses and nursing students and which are the most frequently experienced anxiety symptoms?
- What is the correlation between different work environments in psychiatric nursing and the development of anxiety symptoms?
- What is the impact of rotating night shifts on the development of anxiety symptoms?
- What is the correlation between the development of anxiety symptoms and the employees' work experience, gender, self-rated health and economic status, and smoking habits?

## Methods

The study was based on a non-experimental quantitative research method. A standardised structured questionnaire was deployed as a research instrument.

### *Description of the research instrument*

The structured questionnaire was divided into three sections. The first section inquired about demographics and workplace of the respondents. In the second section the Slovene translation of the free

online test for anxiety – the Burns Anxiety Inventory (BAI) (Burns, 2002) was used for data collection. This structured questionnaire (BAI) is divided into three parts, namely, anxious feelings, anxious thoughts, and physical symptoms. To evaluate the level of anxiety indicated on the checklist, each item is added up numerically: 0 to 4 = minimal or no anxiety, 5 to 10 = borderline anxiety, 11 to 20 = mild anxiety, 21 to 30 = moderate anxiety, 31 to 50 = severe anxiety, and 51 to 99 = extreme anxiety or panic (Burns 2002). The third section of the questionnaire included statements about the self-assessed economic and health status and physical fitness/activities of the respondents. A Likert-type scale was used to determine the intensity of experience on a continuum from strongly agree to strongly disagree with a choice of five pre-coded responses. The Likert scale was combined with a 5 point assessment scale (1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent). Cronbach's Alpha was used to estimate the reliability of a psychometric test. Its value equals 0.831 and confirms the reliability of the instrument used (Cencič, 2009).

### *Description of a sample*

The survey was conducted among graduate nurses and nursing technicians in three psychiatric hospitals in Slovenia and the third-year nursing students of the Faculty of Health Care Jesenice during their clinical practice in psychiatric settings in the study year 2013/2014. Of the 270 questionnaires, non-randomly distributed among a probability sample of psychiatric nursing personnel, a total of 192 were returned, yielding a return rate of 71 %. Of 80 questionnaires distributed among nursing students, a total of 50 were returned, yielding a return rate of 62 %. All the returned questionnaires were fully completed and included in the statistical analysis.

The research sample consisted of 192 (79.3 %) nursing professionals employed in three Slovenian psychiatric hospitals and 50 (20.7 %) nursing students performing their clinical practice in psychiatric settings. The percentage of female participants (186, 76.9 %) was significantly higher than the percentage of males (56, 23.1 %). The study included 73 (30.1 %) of nurses from the Psychiatric Department of the University Clinical Centre Maribor, 60 (24.8 %) nurses from the Psychiatric Hospital Idrija, and 59 (24.2 %) nurses from the Psychiatric Hospital Begunje. According to the results of the analysis, 62 respondents (32.3 %) of the respondents had between 20 to 29 years of working experience, 52 (27.1 %) of the respondents had between 10 to 19 years of working experience, 41 (21.4 %) of the respondents had less than 10 years, and 37 (19.3 %) of the respondents had 30 to 39 years of working experience. The majority of the

respondents (157, 64.9 %) have completed secondary school education, 8 (3.3 %) have a higher professional education, and 77 (31.8 %) hold BSc degree in nursing. Nearly half of the participants 109 (45 %) come from urban areas, 73 (30.2 %) of the participants are from rural areas and 60 (24.8 %) come from the suburbs. A good half 125 (65.1 %) of the respondents work in places requiring special surveillance for more than half of their working hours. The same number of the respondents (125, 65.1 %) work rotating night shifts more than five times a month, and 13 (6.8 %) of the respondents work more than seven nights per month. Less than five night shifts are performed by 59 (30.7 %) respondents.

### *Description of the research procedure and data analysis*

The approval to conduct the survey was obtained from the relevant authorities in all participating hospitals as well as the Faculty of Health Care Jesenice. All the participants were informed with the aim of the study and the content of the questionnaire, verbally and in writing. Participation was voluntary and the participants' anonymity was ensured. The study was carried out from June to August 2014. The data collected were statistically analysed using SPSS, version 22 (IBM, 2013). The descriptive statistics was used to establish the differences between the variables. The variables are described by frequency distribution, displayed by percentages and central tendency, described by mean or average values ( $\bar{x}$ ). The data collected were processed by different statistical methods, namely, the *t*-test for independent samples, descriptive statistics, Levene's test, the ANOVA statistical test, the Welch's *t*-test, the post hoc analysis and the Pearson's correlation coefficient. The level of statistical significance was set at  $p < 0.05$ .

## **Results**

Results of the study show that both mental health nurses as well as the students in psychiatric setting may develop anxiety symptoms. These symptoms are, however, less frequently experienced by the nursing personnel than the students ( $\bar{x} = 0.30$  and  $\bar{x} = 0.35$ , respectively). The employees are more likely to develop physical symptoms ( $\bar{x} = 0.33$ ) while the students more commonly experience anxiety feelings ( $\bar{x} = 0.36$ ) and anxiety thoughts ( $\bar{x} = 0.36$ ). The *t*-test for independent samples revealed that anxiety thoughts are statistically significantly more frequent in students than in nursing employees ( $t = -2.077$ ,  $p = 0.039$ ). No statistically significant differences were established in relation to other symptoms (Table 1).

Table1: *The prevalence of anxiety symptoms among nursing employees and nursing students*  
 Tabela 1: *Pojavnost znakov anksioznosti med zaposlenimi v zdravstveninegi in študenti zdravstvene nege*

<i>Prevalence of anxiety in employees/students</i>		<i>n</i>	$\bar{x}$	<i>s</i>	<i>Std. err.</i>	<i>t</i>	<i>p</i>
Anxious feelings	Employees	192	0.31	0.32	0.02	-0,923	0.357
	Students	50	0.36	0.36	0.05		
Anxious thoughts	Employees	192	0.25	0.34	0.02	-2.077	0.039
	Students	50	0.36	0.31	0.04		
Physical symptoms	Employees	192	0.33	0.39	0.03	0.099	0.921
	Students	50	0.32	0.34	0.05		
Anxiety total score	Employees	192	0.30	0.32	0.02	-1.02	0.309
	Students	50	0.35	0.28	0.04		

*Legend/Legenda: n – number/število;  $\bar{x}$  – average value/povprečna vrednost; s – standard deviation/standardni odklon; Std. err. – standard error/standardna napaka; t – t-test value/vrednost t testa; p – statistically significant/statistična značilnost*

The data on frequency distribution of specific symptoms show that the most pronounced symptoms among anxiety thoughts are: Difficulty concentrating ( $\bar{x} = 0.69$ ), Fears of criticism or disapproval ( $\bar{x} = 0.84$ ) and Racing thoughts or having your mind jump from one thing to next ( $\bar{x} = 0.30$ ). The most common physical symptoms of the respondents include: Feeling tired, weak or easily exhausted ( $\bar{x} = 0.87$ ), Skipping or racing or pounding of the heart ( $\bar{x} = 0.60$ ) and Sweating not brought on by heat ( $\bar{x} = 0.48$ ). The employees of the Psychiatric Hospital Indrija ( $\bar{x} = 0.41$ ) experience anxiety more frequently than those of the Psychiatric Hospital Begunje ( $\bar{x} = 0.25$ ) and the Psychiatric Department of the University Clinical Centre Maribor ( $\bar{x} = 0.24$ ).

The nursing professionals working in departments under special surveillance more frequently experience anxiety feelings ( $\bar{x} = 0.33$ ) and anxiety thoughts ( $\bar{x} = 0.26$ ) compared with those working in open psychiatric units. These differences are, however, not statistically significant ( $t = 0.553$ ,  $p = 0.581$ ). Similarly, no statistically significant difference was established between employees working overnight or having rotating shifts in comparison to those who, on average, less frequently work night and rotating shifts ( $t = -1.395$ ,  $p = 0.165$ ).

The study aimed to establish the correlation between anxiety symptoms and the years of working experience. From the data in Table 2, it is apparent

that the greatest differences exist in the occurrence of physical symptoms, but these differences are not statistically significant ( $t = 0.499$ ,  $p = 0.683$ ). Gender-related differences can be observed in the prevalence of anxiety thoughts which are more prevalent in female ( $\bar{x} = 0.26$ ) than male employees ( $\bar{x} = 0.21$ ). In the cohort of students, the greatest gender-related differences were noted in experiencing the anxiety feelings. The female/male ratio was  $\bar{x} = 0.42$  and  $\bar{x} = 0.19$ , respectively. There are no statistically significant gender-related differences among employees, while in students statistically significant differences were identified in experiencing anxiety feelings which are more frequent in females than males ( $t = 2.041$ ,  $p = 0.046$ ) (Table 2).

The study explored into the relation between anxiety symptoms and the respondents' nicotine dependence. The respondents were divided into the group of regular smokers, occasional smokers and non-smokers. It was established that regular smokers are more liable to develop anxiety symptoms than non-smokers. Statistical significance of this variable was calculated with the ANOVA statistical test and the Welch's t-test. In the group of employees, significant positive correlation was found between smoking habits in all the anxiety symptoms ( $p < 0.05$ ), while no such differences were identified among student respondents ( $p > 0.05$ ) (Table 3).

Table 2: Prevalence of anxiety by gender

Tabela 2: Pojavnost anksioznosti glede na spol anketirancev

Prevalence of anxiety by gender			<i>n</i>	$\bar{X}$	<i>s</i>	<i>t</i>	<i>p</i>
Anxiety feelings	Employees	female	149	0.31	0.32	-0.499	0.618
		male	43	0.33	0.35		
	Students	female	37	0.42	0.38	2.041	0.046
		male	13	0.19	0.21		
Anxiety thoughts	Employees	female	149	0.26	0.36	0.849	0.397
		male	43	0.21	0.26		
	Students	female	37	0.37	0.34	0.471	0.639
		male	13	0.32	0.17		
Physical symptoms	Employees	female	149	0.33	0.4	0.394	0.964
		male	43	0.31	0.35		
	Students	female	37	0.34	0.37	0.826	0.413
		male	13	0.25	0.19		
Anxiety total score	Employees	female	149	0.3	0.33	0.288	0.676
		male	43	0.28	0.28		
	Students	female	37	0.38	0.31	1.353	0.182
		male	13	0.26	0.14		

Legend/Legenda: *n* – number/število;  $\bar{X}$  – average value/povprečnavrednost; *s* – standard deviation/standardni odklon; *t*–test value/vrednost *t* testa; *p* – statistically significant/statistična značilnost

Table 3: Prevalence of anxiety in smokers

Tabela 3: Pojavnost anksioznosti pri kadilcih

Prevalence of anxiety in smokers		<i>n</i>	$\bar{X}$	<i>s</i>	Std. err.	ANOVA		Welch's <i>t</i> -test		
						<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>	
Anxiety feelings	Employees	I do not smoke	118	0.28	0.28	0.03	/	/	3.323	0.042
		I smoke occasionally	36	0.25	0.23	0.04				
		I smoke regularly	38	0.46	0.47	0.08				
	Students	I do not smoke	30	0.38	0.39	0.07	0.439	0.647	/	/
		I smoke occasionally	11	0.27	0.19	0.06				
		I smoke regularly	9	0.41	0.39	0.13				
Anxiety thoughts	Employees	I do not smoke	118	0.23	0.33	0.03	3.464	0.33	/	/
		I smoke occasionally	36	0.18	0.25	0.04				
		I smoke regularly	38	0.37	0.39	0.06				
	Students	I do not smoke	30	0.32	0.26	0.05	1.075	0.35	/	/
		I smoke occasionally	11	0.36	0.33	0.10				
		I smoke regularly	9	0.48	0.40	0.13				

Continues/Se nadaljuje

Prevalence of anxiety in smokers		n	$\bar{x}$	s	Std. err.	ANOVA		Welch's t-test		
						F	p	F	p	
Physical symptoms	I do not smoke	118	0.3	0.36	0.03					
	Employees I smoke occasionally	36	0.23	0.21	0.04	/	/	4.688	0.012	
	I smoke regularly	38	0.51	0.53	0.09					
	Students	I do not smoke	30	0.32	0.34	0.06				
		I smoke occasionally	11	0.26	0.18	0.05	0.511	0.603	/	/
		I smoke regularly	9	0.41	0.48	0.16				
Anxiety total score	I do not smoke	118	0.27	0.29	0.03					
	Employees I smoke occasionally	36	0.22	0.20	0.03	/	/	4.36	0.017	
	I smoke regularly	38	0.45	0.43	0.07					
	Students	I do not smoke	30	0.34	0.27	0.05				
		I smoke occasionally	11	0.30	0.18	0.05	0.616	0.544	/	/
		I smoke regularly	9	0.43	0.41	0.14				

Legend/Legenda: n – number/število;  $\bar{x}$  – average value/povprečna vrednost; s – standard deviation/standardni odklon; Std. err. – Standard error/standardna napaka; F – difference between groups/razlika med skupinami; p – statistically significant/statistična značilnost

The survey also explored the impact of self-rated economic ( $\bar{x} = 3.22$ ) and health status ( $\bar{x} = 3.83$ ) on the development of anxiety symptoms in nursing

Table 4: Prevalence of anxiety in relation to self-assessed health and economic status

Tabela 4: Pojavnost anksioznosti glede na samooceno zdravja te ekonomskega stanja

Prevalence of anxiety		How would you assess your economic status?	How would you assess your health status?
Anxiety feelings	r	-0.263**	-0.306**
	p	0.000	0.000
	n	192	192
Anxiety thoughts	r	-0.176*	-0.243**
	p	0.015	0.001
	n	192	192
Physical symptoms	r	-0.225**	-0.317**
	p	0.002	0.000
	n	192	192
Anxiety total score	r	-0.241**	-0.317**
	p	0.001	0.000
	n	192	192

Legenda/Legend: r – Pearson's correlation coefficient/Pearsonov korelacijski koeficient; p – statistically significant/statistična značilnost; \*\*correlation is statistically significant at level 0.01/korelacija je statistično pomembna na nivoju 0,01; \*correlation is significant at level 0.05/korelacija je statistično pomembna na nivoju 0,05; n – number/število

employees. The Pearson's correlation coefficient was used to measure the relation between the variables. It was established that subjective economic and health status is inversely associated with the prevalence and intensity of anxiety symptoms. The anxiety symptoms in the respondents were more pronounced when the self-rated economic status and health condition scores were low ( $p = 0.01$  and  $p = 0.001$  respectively). In student respondents, no statistically significant differences in this respect were identified (Table 4).

The results obtained provide evidence that 87 (36 %) of the respondent's experience minimal or no anxiety related to work or clinical practice in psychiatric settings, 75 (31 %) of the respondents experience borderline anxiety, 51 (21.1 %) mild anxiety, 15 (6.2 %) moderate anxiety, 11 (4.5 %) severe anxiety, and 3 (1.2 %) extreme anxiety or panic.

## Discussion

The purpose of the current study was to determine the prevalence of anxiety symptoms in nursing employees and the students during their clinical practice in psychiatric settings. The choice of the research sample consisting of nursing employees and students was based on the assumption that similar anxiety symptoms are displayed in both groups of respondents. Melincavage (2011) argues that anxiety experienced by student nurses may interfere with the acquisition of knowledge and skills during clinical practice. Nursing professionals have to cope with stressful situations on numerous occasions. Gao and

colleagues (2012) reported that nurses work in a stressful environment which may affect their mental well-being. The prevalence of anxiety symptoms in nurses was found to be much higher than that in teachers, medical students, doctors or even cancer patients.

Results of the current study show that nursing employees develop mainly the physical symptoms of anxiety, especially fatigue, weakness and exhaustion, which accords with earlier observations (Stathopoulou, 2011). Previous research indicates that working in a psychiatric setting is associated with increased work stress, high job strain and psychological distress. Mental health nurses are exposed to stressful events, including patient-perpetrated aggression and violence. Personal safety and health concerns and the concern for the physical and psychological well-being of patients dominate and have a profound impact on nurses (Chen, et al., 2005; Magnavita & Heponiem, 2012; Lee, et al., 2015). The prevalence of anxiety symptoms among psychiatric nurses was found to be higher than among other nursing professionals. The research conducted in all Slovenian psychiatric hospitals in 2009 produced similar results as the current study (Čuk & Klemen, 2010).

The current study shows that nursing students most frequently experience anxiety thoughts and anxiety feelings. Statistically significant differences were established between the nursing employees and the students in regard to anxiety thoughts which are more common in the latter group. Chernomas and Shapiro (2013) claim that stress, depression, and anxiety can interfere with learning, affect academic performance, and impair clinical practice performance. The same anxiety symptoms were identified in the student respondents, which validates the results of the current research. Similar results were obtained in the study conducted by Szpak and Kameg (2013) confirming that the greatest anxiety levels are observed in the students when attending psychiatric clinical training. Melo and colleagues (2010) also reported that anxiety is more prevalent in nursing students than in the general student population. The mean scores on the STAI for this sample of nursing students were higher than those previously reported for the general population of university students. The study conducted among American university students confirmed that higher social anxiety may result even in more alcohol problems (Kenney, et al., 2014).

The results of the study did not show any significant work-related increase in anxiety levels of the respondents. It was established, however, that nursing employees working in the units under special surveillance more frequently develop anxiety thoughts and anxiety feelings than those working in general psychiatric units. In contrast to some other research findings (Nooryan, et al., 2012), these differences are, however, not statistically significant.

As some authors offer findings about work-related anxiety symptoms which differ from the results of the current study, further research on this topic is recommended. A study carried out among Taiwanese psychiatric nurses investigated the impact of patients' aggressive behaviour on the increased anxiety symptoms in nursing employees (Chen, et al., 2005). The established prevalence of aggression in psychiatric inpatient units ranges from 6.1 % to 35 % per hospital bed, or 2.54 incidents of the patients' aggressive or violent behaviour per year in comparison to only 0.73 incidents in other hospital wards. Patients' verbal and physical aggression causes significantly higher levels of state anxiety among psychiatric nurses than among other nursing professionals. Gao and colleagues (2012) conducted a study the purpose of which was to investigate anxiety symptoms and the associated factors in nurses working in public city hospitals. Results of the study indicate that among all the factors, the workplace conditions and work-related stressors stood out as the strongest associated factor for anxiety symptoms in nurses. The above study also reveals that the stressful situations and events most commonly occur in psychiatric wards under special surveillance.

In regard to factors conducing to the development of anxiety symptoms, the findings of the current research differ from some published sources (Melo, et al., 2010; Nooryan, et al., 2012). Contrary to some other research findings, the current study, for instance, does not demonstrate any elevated anxiety levels in nurses working in wards under special surveillance. Although previous research tried to establish an association between increased number of anxiety symptoms and working rotating night shifts, no evidence of this association was confirmed in the current study. This finding is in agreement with the results obtained by Portela and colleagues (2004), Ulas and colleagues (2012) and Øyane (2013) who suggest that nurses working rotating night shifts experience even fewer anxiety symptoms. The current study also did not establish any positive correlation between increased number of anxiety symptoms and work experience or gender which accords with observations of some other studies (Boya, et al., 2008; Atindanbila, et al., 2012). Gender-related occurrence of anxiety symptoms was, however, confirmed by the Iranian study of mental disorders among shift work hospital nurses (Ardekani, et al., 2008) which reported that anxiety and somatic symptoms are more common among females. The same results were obtained in the study among Japanese nurses which indicated that female nurses have significantly higher stress levels than males related to stress reactions of fatigue and anxiety (Yada, et al., 2014). Distinct from other findings in the current research, statistically significant higher prevalence of anxiety feelings and thoughts was established among female student respondents.

Multiple studies have demonstrated an association between cigarette smoking and increased anxiety symptoms or disorders (Koprivnikar, 2012; Jamal, et al., 2012; Moylan, et al., 2013). Nicotine-dependence is very common also among nursing professionals. This observation is in agreement with that of O'Donovan (2009) who found that nurses working within psychiatric care have the highest smoking prevalence (47.4%) among the nurses who smoked (O'Donovan, 2009). The most common factors preventing smoking cessation included fear of withdrawal symptoms including stress and anxiety (Berkelmans, et al., 2011). The current study identified a positive correlation between nicotine dependence in nursing employees and the increased prevalence of anxiety symptoms. However, no statistically significant correlation between nicotine dependence and occurrence of anxiety symptoms was established in the student respondents. These results are consistent with the results of the Iranian study conducted on a sample of 1020 high school students (Khademalhosseini, et al., 2015).

The current study confirmed that poor self-reported economic condition and health status present greater risk for the development of anxiety symptoms. Several studies revealed that poor economic conditions substantially and significantly increase the prevalence of anxiety symptoms (Spence, et al., 2002; Hjørleifsdottir, 2007; Gili, et al., 2013).

### *Study limitations*

A considerable limitation of the current study is the non-probability sample, composed of a considerably larger proportion of female nursing professionals who work rotating night shifts in the wards under special surveillance. The sample composition therefore limits our ability to make broader applicability, translation and generalisations of the obtained results.

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## *Slovenian translation/Prevod v slovenščino*

### **Uvod**

Stresni dejavniki, tako doma kot na delu, so lahko izvor anksioznosti (Gomboc, 2010). Delo v zdravstveni negi je stresno in nemalokrat povzroča izgorelost medicinskih sester, ki se običajno kaže z utrujenostjo, izčrpanostjo kot tudi anksioznostjo (Bégar, et al., 2005; Hegney, et al., 2014). Po raziskavi Karanikola in Papatthanassoglou (2013) se kar 10% medicinskih sester sooča s klinično pomembnimi znaki anksioznosti, ki lahko vplivajo na njihove strokovne odločitve. V raziskavi so Gao in sodelavci (2012) ugotovili glavne dejavnike za pojavnost anksioznosti med več kot 1.800 zaposlenimi v zdravstveni negi, med katere so uvrstili: slabo vrednoteno delovno mesto, prisotnost

kroničnih bolezni, slabi odnosi med zaposlenimi in pacienti ter nižji socialni status zaposlenih v zdravstveni negi. Pravilno svetovanje, promocija zdravega načina življenja in dobri medsebojni odnosi na delovnem mestu lahko pomagajo k zmanjšanju pojava anksioznosti ali pa celo preprečijo znake le-te. Ključna ugotovitev raziskovalcev je bila, da se pri skoraj polovici preiskovancev pojavljajo znaki anksioznosti, ki že zahtevajo ukrepanje (Gao, et al., 2012). Tudi raziskava Taghinejad in sodelavcev (2014) potrjuje, da so težave na področju duševnega zdravja med zaposlenimi v zdravstveni negi prisotne, med njimi prednjačijo znaki anksioznosti.

Na pojavnost anksioznih znakov vplivajo tudi različne oblike in področja dela. Izmenično delo, predvsem v nočnem času, je za zdravnike in medicinske sestre stresno, kar lahko negativno vpliva na njihovo delovno učinkovitost (Ardekani, et al., 2008; Melo, et al., 2010). Zaposleni v zdravstveni negi na področju intenzivnih enot v povprečju navajajo pogostejše znake anksioznosti od drugih (Nooryan, et al., 2012). Zaposleni na urgentnih enotah pa so dnevno izpostavljeni različnim stresnim dejavnikom, ki so prav tako lahko pogost dejavnik anksioznosti (Stathopoulou, et al., 2011). Nasprotno nizko stopnjo anksioznosti izkazujejo medicinske sestre, ki so zaposlene v paliativi (Peters, et al., 2013). Rezultati raziskave Kayalha in sodelavcev (2013), kjer so proučevali vpliv spola na anksioznost, so pokazali, da so medicinske sestre v povprečju bolj anksiozne od moških sodelavcev. V raziskavi na Kitajskem v sedmih mestnih bolnišnicah, kjer se je odzvalo kar 75% od 1.807 zaposlenih, so ugotovili, da je pojavnost anksioznosti med medicinskimi sestrami kar 43-odstotna. Dokazali so, da so različni dejavniki, kot so izobrazba, prisotnost kronične bolezni, prehranjevalne navade, telesna aktivnost, ocena bolnišnice, delovno mesto, plača, odnos s pacientom, zadovoljstvo pri delu in drugi dejavniki, statistično značilno povezani s pojavnostjo znakov anksioznosti (Gao, et al., 2012). Podobno sta ugotovila tudi Mark in Smith (2012), ki sta tudi dokazala, da so večja socialna podpora, višje nagrade na delu in strokovno znanje negativno povezane s pojavnostjo anksioznosti. Huang in sodelavci (2013) so izvedli prospektivno študijo, kjer so ugotovili vpliv svetlobe na zaposlene v zdravstveni negi v nočni izmeni. Visoka jakost svetlobe v nočni izmeni lahko vpliva na kronično nespečnost, anksioznost in depresijo. Zdravstvena nega je poklic, za katerega je značilno predvsem izmenično delo. Počitek med izmenami je lahko zaradi zahtev dela krajši, kot ga dopušča zakonodaja (manj kot 12 ur), kar pa naj ne bi vplivalo na pojavnost anksioznih motenj (Flo, et al., 2014).

### *Namen in cilji*

Na osnovi pregledane literature (Selič, 2010; Gao, et

al., 2012) je bil namen raziskave ugotoviti pojavnost anksioznosti ter anksioznih znakov pri zaposlenih v zdravstveni negi na področju psihiatrije ter pri študentih 3. letnika Fakultete za zdravstvo Jesenice (FZJ), ki so opravili klinične vaje na področju psihiatrične zdravstvene nege.

Raziskovalna vprašanja:

- Kakšna je pojavnost znakov anksioznosti med zaposlenimi in študenti ter kateri znaki se najpogosteje pojavljajo?
- Kakšna je razlika v pojavnosti znakov anksioznosti med različnimi delovnimi mesti v psihiatrični zdravstveni negi?
- Kakšen vpliv ima nočno delo na pojavnost znakov anksioznosti?
- Kakšna je razlika v pojavnosti znakov anksioznosti glede na delovno dobo zaposlenih, njihov spol, samooceno zdravja in ekonomski status ter ali so zaposleni in študenti, ki kadijo, bolj dovzetni za pojav znakov anksioznosti kot nekadilci?

## Metode

Raziskava je temeljila na neeksperimentalni kvantitativni metodi empiričnega raziskovanja z uporabo strukturiranega vprašalnika.

### *Opis instrumenta*

Vprašalnik je bil sestavljen iz treh delov. Prvi del vprašalnika zajema demografske podatke ter podatke o delovnem mestu. V drugem delu smo podatke zbirali s pomočjo v slovenščino prevedenega strukturiranega standardiziranega vprašalnika The Burns Anxiety Inventory (Burnsov kontrolni seznam anksioznosti), ki je prosto dostopen za uporabo (Burns, 2002). Burnsov kontrolni seznam anksioznosti se deli na tri dele, in sicer na občutja, misli ter telesne znake. Točkovanje je naslednje: 0–4 = anksioznosti ni ali je minimalna, 5–10 = mejna anksioznost, 11–20 = mila anksioznost, 21–30 = zmerna anksioznost, 31–50 = težka anksioznost, 51–99 = skrajna anksioznost (Burns 2002). Tretji del vprašalnika obsegajo trditve (o ekonomskem položaju, subjektivnem zaznavanju zdravja ter fizični pripravljenosti/aktivnosti). Za oceno teh trditvev smo uporabili Likertovo (petstopenjsko) lestvico v kombinaciji z ocenjevalno lestvico: 1 = zelo slabo, 2 = slabo, 3 = srednje, 4 = dobro, 5 = zelo dobro. Zanesljivost merskega instrumenta smo preverili s Cronbachovim koeficientom alfa, ki znaša 0,831, iz česar lahko sklepamo, da je merski instrument zanesljiv (Cencič, 2009).

### *Opis vzorca*

Anketiranje smo izvedli med zaposlenimi v treh psihiatričnih bolnišnicah v Sloveniji (anketirali smo zdravstvene tehnike in diplomirane medicinske sestre

ter zdravstvenike). Prav tako smo anketiranje izvedli na FZJ med študenti, ki so bili v študijskem letu 2013/14 vpisani v tretji letnik in so opravljali klinično prakso zdravstvene nege na področju psihiatrije. Po metodi priložnostnega vzorca smo nenaključno razdelili 270 vprašalnikov zaposlenim v zdravstveni negi na področju psihiatrije ter dobili vrnjenih 192 vprašalnikov. Med študente 3. letnika FZJ, ki so opravili klinično prakso na področju psihiatrije, smo razdelili 80 vprašalnikov ter dobili vrnjenih 50 vprašalnikov, kar predstavlja 71 odstotno realizacijo vzorca med zaposlenimi v psihiatričnih bolnišnicah ter 62 odstotno realizacijo vzorca študentov FZJ. Vsi vprašalniki so bili pravilno izpolnjeni in zajeti v statistično obdelavo podatkov.

V raziskavi sodelovalo 192 (79,3 %) zaposlenih v zdravstveni negi iz treh slovenskih psihiatričnih bolnišnic in 50 (20,7 %) študentov FZJ, ki so opravili klinično prakso s področja duševnega zdravja. Med anketiranci je bilo 186 (76,9 %) žensk in 56 (23,1 %) moških. Glede na posamezne zdravstvene ustanove smo vključili 73 (30,1 %) zaposlenih z Oddelka za psihiatrijo Univerzitetnega kliničnega centra Maribor, 60 (24,8 %) iz Psihiatrične bolnišnice Idrija ter 59 (24,2 %) iz Psihiatrične bolnišnice Begunje. Največ zaposlenih ima delovno dobo med 20 do 29 let (62 ali 32,3 %), 52 (27,1 %) je zaposlenih od 10 do 19 let, 41 (21,4 %) je zaposlenih manj kot 10 let ter 37 (19,3 %) od 30 do 39 let. 157 (64,9 %) anketiranih ima srednješolsko izobrazbo, 8 (3,3 %) višješolsko ter 77 (31,8 %) visokošolsko. Slaba polovica anketirancev, tj. 109 (45 %), prihaja iz mesta, z vasi 73 (30,2 %) ter iz predmestnega okolja 60 (24,8 %). Več kot polovica zaposlenih, tj. 125 (65,1 %), več kot polovico svojega delovnega časa dela na oddelkih pod posebnim nadzorom. Prav tako več kot polovica zaposlenih, tj. 125 (65,1 %), več kot 5 dni svojega delovnega časa dela v nočni izmeni, 13 (6,8 %) zaposlenih mesečno opravi več kot 7 dni nočnih izmen, 59 (30,7 %) pa ima manj kot 5 nočnih delovnih dni v mesecu.

### *Opis poteka raziskave in obdelave podatkov*

Za izpolnjevanje vprašalnikov smo v vseh treh psihiatričnih bolnišnicah ter FZJ pridobili soglasje za anketiranje. Vsem anketirancem, ki so sodelovali v naši raziskavi, smo pisno in ustno pojasnili namen raziskave in vsebino vprašalnika. Zagotovili smo anonimnost in prostovoljnost pri sodelovanju. Raziskava je potekala od junija do avgusta 2014. Podatke, ki smo jih pridobili s pomočjo vprašalnika, smo statistično obdelali s pomočjo programa SPSS, verzija 22.0 (IBM, 2013). Uporabili smo opisno statistiko, pri spremenljivkah smo uporabili frekvence, odstotke in povprečno vrednost ( $\bar{x}$ ). Na podlagi pridobljenih odgovorov, ki smo jih obdelali z opisnimi statistikami, smo skušali ugotoviti razlike med spremenljivkami. Za analizo podatkov

smo uporabili različne statistične metode: *t*-test za neodvisne vzorce, Levenov test, ANOVO, Welchov test, analizo Post Hoc in Pearsonovo korelacijo. Meja statistične pomembnosti je določala vrednost  $p \leq 0,05$ .

## Rezultati

Rezultati raziskave so pokazali, da se zaposleni v zdravstveni negi na področju psihiatrije in študentje

srečujejo z anksioznimi znaki. Pri zaposlenih v zdravstveni negi je pojavnost znakov anksioznosti nižja ( $\bar{x} = 0,30$ ) kot med študenti ( $\bar{x} = 0,35$ ). Zaposleni v večji meri navajajo prisotnost telesnih znakov ( $\bar{x} = 0,33$ ), med študenti pa so bolj prisotna anksiozna občutja ( $\bar{x} = 0,36$ ) in misli ( $\bar{x} = 0,36$ ). S pomočjo *t*-testa za neodvisne vzorce smo ugotovili, da se anksiozne misli statistično pogosteje pojavljajo pri študentih kot pri zaposlenih ( $t = -2,077$ ,  $p = 0,039$ ). Pri ostalih znakih statistično pomembnih razlik ni (Tabela 1).

Tabela 1: *Pojavnost znakov anksioznosti med zaposlenimi v zdravstveni negi in študenti zdravstvene nege*  
Table 1: *The incidence of signs of anxiety among employees in nursing and nursing students*

Pojavnost anksioznosti zaposleni/študenti		<i>n</i>	$\bar{x}$	<i>s</i>	Std. err.	<i>t</i>	<i>p</i>
Anksiozna občutja	Zaposleni	192	0,31	0,32	0,02	-0,923	0,357
	Študenti	50	0,36	0,36	0,05		
Anksiozne misli	Zaposleni	192	0,25	0,34	0,02	-2,077	0,039
	Študenti	50	0,36	0,31	0,04		
Telesni znaki	Zaposleni	192	0,33	0,39	0,03	0,099	0,921
	Študenti	50	0,32	0,34	0,05		
Anksioznost skupaj	Zaposleni	192	0,30	0,32	0,02	-1,02	0,309
	Študenti	50	0,35	0,28	0,04		

Legenda/Legend: *n* – število/number;  $\bar{x}$  – povprečna vrednost/average; *s* – standardni odklon/standard deviation; Std. err. – standardna napaka/standard error; *t* – vrednost *t*-testa/*t*-test value; *p* – statistična značilnost/statistically significant

Če pogledamo pogostost posameznih znakov, razberemo, da se med anksioznimi mislimi zaposleni in študenti najpogosteje srečujejo s težavami z zbranstvo ( $\bar{x} = 0,69$ ), bojijo se kritiziranja ( $\bar{x} = 0,84$ ) in drvečih ter begajočih misli ( $\bar{x} = 0,30$ ). Pri telesnih znakih pa se anketiranci v največji meri srečujejo z utrujenostjo in izčrpanostjo ( $\bar{x} = 0,87$ ), nerednim ali hitrim srčnim utripom ( $\bar{x} = 0,60$ ) ter potenjem ( $\bar{x} = 0,48$ ). Zaposleni v Psihiatrični bolnišnici Idrija se pogosteje srečujejo z znaki anksioznosti ( $\bar{x} = 0,41$ ) kot zaposleni v Psihiatrični bolnišnici Begunje ( $\bar{x} = 0,25$ ) ter zaposlenimi iz mariborskega oddelka za psihiatrijo ( $\bar{x} = 0,24$ ).

Zaposleni na oddelkih pod posebnim nadzorom se v primerjavi s tistimi, ki delajo na odprtih psihiatričnih oddelkih, pogosteje srečujejo z anksioznimi občutji ( $\bar{x} = 0,33$ ) ter anksioznimi mislimi ( $\bar{x} = 0,26$ ), vendar te razlike niso statistično pomembne ( $t = 0,553$ ,  $p = 0,581$ ). Tudi primerjava zaposlenih, ki delo opravljajo izmensko (nočno delo) nismo ugotovili statistično pomembnih razlik, v primerjavi s tistimi, ki

opravljajo povprečno manj nočnih izmen ( $t = -1,395$ ,  $p = 0,165$ ).

V raziskavi smo ugotavljali pojavnost znakov anksioznosti glede na delovno dobo zaposlenih. Razlike v povprečnih vrednostih se pojavljajo v največji meri pri telesnih znakih anksioznosti, vendar o statistično pomembnih razlikah ne moremo govoriti ( $t = 0,499$ ,  $p = 0,683$ ). Ugotavljamo tudi razlike pojavnosti znakov anksioznosti glede na spol anketirancev. V največji meri se razlike med zaposlenimi pojavljajo pri anksioznih mislih, saj je pri ženskih anketirankah  $\bar{x} = 0,26$ , medtem ko je pri moških anketirancih  $\bar{x} = 0,21$ . Pri študentih se v največji meri razlike med spoloma pojavljajo pri anksioznih občutjih – pri ženskah je  $\bar{x} = 0,42$ , pri moških pa  $\bar{x} = 0,19$ . Ugotovili smo, da se med zaposlenimi statistično pomembne razlike med spoloma ne pojavljajo, medtem ko se pri študentih pojavljajo statistično pomembne razlike pri anksioznih občutjih – ženske so namreč bolj anksiozne ( $t = 2,041$ ,  $p = 0,046$ ) (Tabela 2).

Tabela 2: Pojavnost anksioznosti glede na spol anketirancev  
 Table 2: The incidence of anxiety by gender of respondents

Pojavnost anksioznosti glede na spol			<i>n</i>	$\bar{X}$	<i>s</i>	<i>t</i>	<i>p</i>
Anksiozna občutja	Zaposleni	ženska	149	0,31	0,32	-0,499	0,618
		moški	43	0,33	0,35		
	Študenti	ženska	37	0,42	0,38	2,041	0,046
		moški	13	0,19	0,21		
Anksiozne misli	Zaposleni	ženska	149	0,26	0,36	0,849	0,397
		moški	43	0,21	0,26		
	Študenti	ženska	37	0,37	0,34	0,471	0,639
		moški	13	0,32	0,17		
Telesni znaki	Zaposleni	ženska	149	0,33	0,4	0,394	0,964
		moški	43	0,31	0,35		
	Študenti	ženska	37	0,34	0,37	0,826	0,413
		moški	13	0,25	0,19		
Anksioznost skupaj	Zaposleni	ženska	149	0,3	0,33	0,288	0,676
		moški	43	0,28	0,28		
	Študenti	ženska	37	0,38	0,31	1,353	0,182
		moški	13	0,26	0,14		

Legenda/Legend: *n* – število/number;  $\bar{X}$  – povprečna vrednost/average; *s* – standardni odklon/standard deviation; *t* – vrednost *t*-testa/*t*-test value; *p* – statistična značilnost/statistically significant

V raziskavi smo ugotavljali pojavnost znakov anksioznosti glede na to, ali zaposleni in študenti kadijo ali ne. Glede na kajenje smo anketirance razdelili na redne, občasne ter nekadilce. Anketiranci, ki kadijo redno, so bolj dovzetni za znake anksioznosti. Ali so

razlike med skupinami statistično pomembne, smo ugotavljali na podlagi testov ANOVA in Welchovega testa. Ugotovili smo, da se med zaposlenimi povsod pojavljajo statistično pomembne razlike ( $p < 0,05$ ), med študenti pa ne ( $p > 0,05$ ) (Tabela 3).

Tabela 3: Pojavnost anksioznosti pri kadilcih  
 Table 3: The incidence of anxiety in smokers

Pojavnost anksioznosti pri kadilcih			<i>n</i>	$\bar{X}$	<i>s</i>	Std. err.	ANOVA		Welchow test	
							<i>F</i>	<i>p</i>	<i>F</i>	<i>p</i>
Anksiozna občutja	Zaposleni	ne kadim	118	0,28	0,28	0,03	/	/	3,323	0,042
		kadim občasno	36	0,25	0,23	0,04				
		kadim redno	38	0,46	0,47	0,08				
	Študenti	ne kadim	30	0,38	0,39	0,07	0,439	0,647	/	/
		kadim občasno	11	0,27	0,19	0,06				
		kadim redno	9	0,41	0,39	0,13				

Se nadaljuje/Continues

Pojavnost anksioznosti pri kadilcih			n	$\bar{x}$	s	Std. err.	ANOVA		Welchow test	
							F	p	F	p
Anksiozne misli	Zaposleni	ne kadim	118	0,23	0,33	0,03				
		kadim občasno	36	0,18	0,25	0,04	3,464	0,33	/	/
		kadim redno	38	0,37	0,39	0,06				
	Študenti	ne kadim	30	0,32	0,26	0,05				
		kadim občasno	11	0,36	0,33	0,10	1,075	0,35	/	/
		kadim redno	9	0,48	0,40	0,13				
Telesni znaki	Zaposleni	ne kadim	118	0,3	0,36	0,03				
		kadim občasno	36	0,23	0,21	0,04	/	/	4,688	0,012
		kadim redno	38	0,51	0,53	0,09				
	Študenti	ne kadim	30	0,32	0,34	0,06				
		kadim občasno	11	0,26	0,18	0,05	0,511	0,603	/	/
		kadim redno	9	0,41	0,48	0,16				
Anksioznost skupaj	Zaposleni	ne kadim	118	0,27	0,29	0,03				
		kadim občasno	36	0,22	0,20	0,03	/	/	4,36	0,017
		kadim redno	38	0,45	0,43	0,07				
	Študenti	ne kadim	30	0,34	0,27	0,05				
		kadim občasno	11	0,30	0,18	0,05	0,616	0,544	/	/
		kadim redno	9	0,43	0,41	0,14				

Legenda/Legend: n – število/number;  $\bar{x}$  – povprečna vrednost/average; s – standardni odklon/standard deviation; Std. Err. – standardna napaka/standard error; F – razlika med skupinami/difference between groups; p – statistična značilnost/statistically significant

Tabela 4: Pojavnost anksioznosti glede na samooceno zdravja ter ekonomskega stanja  
Table 4: The incidence of anxiety in relation to the self-assessed health and economic status

Pojavnost anksioznosti		Kako zaznavate svoj ekonomski položaj?	Kako ocenjujete svoje zdravje?
Anksiozna občutja	r	-0,263**	-0,306**
	p	0,000	0,000
	n	192	192
Anksiozne misli	r	-0,176*	-0,243**
	p	0,015	0,001
	n	192	192
Telesni simptomi	r	-0,225**	-0,317**
	p	0,002	0,000
	n	192	192
Anksioznost skupaj	r	-0,241**	-0,317**
	p	0,001	0,000
	n	192	192

Legenda/Legend: r – Pearsonov korelacijski koeficient/Pearson's coefficient of correlation; p – statistična značilnost/statistically significant; \*\*korelacija je statistično pomembna na nivoju 0,01/correlation is significant at level 0.01; \*korelacija je statistično pomembna na nivoju 0,05/correlation is significant at level 0,05; n – število/number

V raziskavi pa nas je zanimalo tudi, kako zaposleni ocenjujejo svoj ekonomski položaj. Ocenili so ga kot srednje dobrega ( $\bar{x} = 3,22$ ), svoje zdravje pa kot dobro ( $\bar{x} = 3,83$ ). Zanimalo nas je, ali obstaja povezava med ekonomskim statusom in oceno zdravja anketirancev in kako to vpliva na pojav znakov anksioznosti, zato smo uporabili Pearsonovo korelacijo. Korelacija je povsod negativna – to pomeni, da so anksiozni znaki anketirancev bolj izraziti, kadar svoj ekonomski položaj ( $p = 0,01$ ) in zdravje zaznavajo slabše ( $p = 0,001$ ). Pri študentih statistično pomembnih razlik v znakih anksioznosti nismo našli (Tabela 4).

V raziskavi tako ugotavljamo, da 87 (36 %) anketirancev ne doživlja anksioznosti, povezane z delom v zdravstveni negi oziroma študijem, 75 (31 %) anketiranih je na stopnji mejne anksioznosti, 51 (21,1 %) je milo anksioznih, zmerno anksioznih je 15 (6,2 %), v težko stopnjo anksioznosti se jih uvršča 11 (4,5 %), 3 (1,2 %) pa pri svojem delu doživljajo tudi skrajno anksioznost.

## Diskusija

V raziskavi smo želeli raziskati pojavnost ter znake anksioznosti med zaposlenimi v zdravstveni negi na področju psihiatrije ter med študenti zdravstvene nege, ki so opravljali klinično prakso na psihiatriji.

Ti dve skupini se med seboj prepletata, saj menimo, da se situacije, ki povzročajo pojavnost anksioznosti med klinično prakso, v večjem obsegu pojavljajo tudi kasneje pri strokovnem delu, kar ugotavljajo tudi Melincavage (2011), ki pojav anksioznosti med opravljanjem kliničnih vaj vidi kot veliko oviro pri pridobivanju znanja iz kliničnega okolja. Da je delo v zdravstveni negi povezano z dejavniki, ki povzročajo anksioznost, ugotavljajo raziskovalci na Kitajskem, kjer Gao in sodelavci (2012) ugotavljajo, da je bila pojavnost anksioznosti pri medicinskih sestrah višja kot pri učiteljih, študentih medicine, zdravnikih ter po ugotovitvah raziskave primerljiva s pojavnostjo anksioznosti, ki se pojavlja pri bolnikih, obolelih zaradi komorbidnosti.

Ugotovili smo, da se pri zaposlenih v največji meri pojavljajo telesni znaki anksioznosti, med katerimi so zaposleni opisovali, da so najpogosteje izpostavljeni utrujenosti in izčrpanosti, kar potrjuje tudi Stathopoulou (2011). Dokazano je, da je stopnja anksioznosti pri zdravstvenih delavcih, ki so zaposleni v psihiatriji, večja kot pri zdravstvenih delavcih, ki so zaposleni na drugih področjih zdravstvene nege. Predvsem se to kaže pri delu z agresivnimi pacienti, ki zaposlene velikokrat izčrpajo ter utrudijo. Stopnja anksioznosti se povečuje s stopnjo pacientove agresivnosti, kar zaposlene v zdravstveni negi na področju psihiatrije velikokrat postavlja na lastno preizkušnjo (Chen, et al., 2005; Magnavita & Heponiemi, 2012; Lee, et al., 2015). Že raziskava v letu 2009, ki je bila izvedena v vseh slovenskih psihiatričnih bolnišnicah, potrjuje podobne izsledke kot naša (Čuk & Klemen, 2010).

Naša raziskava je pokazala, da se med študenti v največji meri pojavljajo anksiozne misli ter anksiozna občutja. Med skupinama zaposlenih in študentov smo ugotovili statistično pomembne razlike – med študenti se v večji meri pojavljajo anksiozne misli. Chernomas in Shapiro (2013) menita, da stres in anksioznost vplivata na učenje in učni uspeh pri študentih. Prav te znake so anketirani študenti v naši raziskavi opredelili kot najpogostejše, kar daje rezultatom naše raziskave posebno verodostojnost. Prav tako Szpak in Kameg (2013) ugotavljata, da so najbolj anksiozni tisti študenti, ki se v svojem kliničnem okolju srečujejo s psihiatrično zdravstveno nego. Tudi Melo in sodelavci (2010) ugotavljajo, da je anksioznost pri študentih zdravstvene nege višja kot pri splošni populaciji študentov. Zanimiva raziskava na ameriških fakultetah pa je pokazala, da je anksioznost pogost motivator za uživanje alkohola pri študentih (Kenney, et al., 2014).

Delovno mesto anketirancev v naši raziskavi nima pomena za pojavnost znakov anksioznosti. Sicer se zaposleni, ki delo opravljajo na oddelkih pod posebnim nadzorom (v primerjavi s splošnimi psihiatričnimi oddelki), v povprečju pogosteje srečujejo z anksioznimi občutji ter anksioznimi mislimi, vendar ne gre za statistično pomembne razlike, nasprotno od nekaterih tujih raziskav (Nooryan, et al., 2012). Menimo, da bi bilo treba področje anksioznosti na oddelkih pod

posebnim nadzorom pri nas še dodatno raziskati, saj je kar nekaj avtorjev sklenilo drugačne zaključke, ki kažejo na manjšo verodostojnost naših podatkov. Raziskava, ki je bila opravljena v Tajvanu (Chen, et al., 2005), je izpostavila pomembnost potencialnega nasilja bolnikov z duševno motnjo. Razširjenost nasilja med hospitaliziranimi pacienti z duševno motnjo se giblje med 6,1 % do 35 % oziroma 2,54 napada na leto na posteljno enoto v primerjavi z nepsihiatričnimi posteljnimi enotami, kjer je incidenca napadov 0,73 na posteljno enoto. Tako vedenje pacientov povzroča visoko pojavnost anksioznosti pri zaposlenih, ki skrbijo zanje. Namen raziskave Gao s sodelavci (2012) je bil identificirati dejavnike, povezane z znaki anksioznosti. Eden najpogostejših je bil delovno mesto zaposlenega ter z njim povezani stresorji. Isti avtorji so ugotovili, da se najpogosteje stresni ter nezaželeni dogodki v psihiatriji pripetijo na oddelkih pod posebnim nadzorom.

Pri dejavniki tveganja za pojav anksioznosti se, če naše rezultate primerjamo z ugotovitvami drugih avtorjev (Melo, et al., 2010; Nooryan, et al., 2012), pokaže kar nekaj razlik. Poleg dela na oddelkih pod posebnim nadzorom tuji avtorji kot dejavnik tveganja za pojavnost anksioznosti, ki se pri nas ni izkazal, navajajo tudi izmensko delo (Arkedani, et al., 2008). V naši raziskavi tudi tega ne moremo potrditi. Kar pa se sklada z nekaterimi tujimi raziskavami, ki pri medicinskih sestrah, ki opravljajo nočno delo, prav tako niso odkrile pogostejših znakov anksioznosti kot pri medicinskih sestrah, ki delo opravljajo le podnevi. Ugotavljajo celo, da imajo medicinske sestre, ki delo opravljajo tudi ponoči, manj znakov anksioznosti kot medicinske sestre, ki delo opravljajo le podnevi (Portela, et al., 2004; Ulas, et al., 2012; Øyane, 2013). Tudi delovna doba in spol se v naši raziskavi nista izkazala kot dejavnika tveganja za pojav znakov anksioznosti, podobno kot navajajo nekateri drugi (Boya, et al., 2008; Atindanbila, et al., 2012). Nasprotno od tega pa Ardekani in sodelavci (2008) ugotavljajo, da so med ženskami v večji meri prisotni znaki anksioznosti kot med moškimi, anksioznost pa se je najbolj izražala s telesnimi znaki. Tudi japonska raziskava potrjuje razlike v pojavnosti anksioznosti med spoloma (Yada, et al., 2014). Kar je pokazala tudi naša raziskava, saj se študentke zdravstvene nege statistično pomembneje srečujejo z anksioznimi občutji v primerjavi z moškimi kolegi.

Delež kadilcev je veliko večji pri populaciji, ki se pogosteje srečuje z anksioznostjo, kar potrjuje tudi visoka povezanost kajenja z anksioznostjo (Jamal, et al., 2012; Koprivnikar, 2012; Moylan, et al., 2013). Odvisnost od nikotina pa je visoka tudi pri zaposlenih v zdravstveni negi. Zaposleni v zdravstveni negi na področju psihiatrije pogosteje zlorabljajo nikotin, saj jih po navedbah raziskovalcev kadi skoraj polovica (O'Donovan, 2009). Kot razloge, zakaj medicinske sestre ne opustijo kajenja, pa največkrat poleg strahu

pred abstinenčnimi simptomi navajajo prav strah pred pojavnostjo znakov anksioznosti (Berkelmans, et al., 2011). Tudi mi smo ugotovili, da se razlike v pojavnosti anksioznosti med anketiranimi zaposlenimi, ki kadijo, ter nekadilci pojavljajo. Med študenti nismo ugotovili statistično pomembnih razlik, kar se sklada z raziskavo, opravljeno med 1.020 študenti v Iranu, kjer raziskovalci prav tako niso ugotovili statistično pomembnih razlik med kajenjem ter anksioznostjo pri študentih (Khademalhosseini, et al., 2015).

Pri vplivu ocenjevanja ekonomskega položaja in samooceni zdravja anketirancev smo dokazali, da tisti, ki svoj ekonomski položaj in zdravje ocenjujejo kot slabša, bolj občutijo znake anksioznosti. Mnoge raziskave potrjujejo povezanost med anksioznostjo in ekonomskim položajem. Slabši socialno-ekonomski status je tesno povezan s pojavnostjo znakov anksioznosti (Spence, et al., 2002; Hjørleifsdottir, 2007; Gili, et al., 2013).

### Omejitve raziskave

Največjo omejitev raziskave po našem mnenju predstavlja okoliščina, da je raziskava zajemala nenaključni vzorec medicinskih sester in zdravstvenih tehnikov, kjer so v večini prevladovale anketiranke ženskega spola ter anketiranci, ki delo opravljajo ponoči in na oddelkih pod posebnim nadzorom. Kar nam prav pri omenjenih dejavnikih za pojavnost anksioznosti onemogoča posplošiti preučevani vzorec.

### Zaključek

Delo v zdravstveni negi od zaposlenih zahteva veliko skrbstvenega dela, bližine, sočutja in empatije. Prav ta izpostavljena delovna mesta pa nemalokrat povzročajo pojavnost znakov anksioznosti. Z raziskavo smo ugotovili, da se zaposleni in študenti zdravstvene nege najpogosteje srečujejo z mejno anksioznostjo, med najpogostejšimi znaki pa navajajo utrujenost in izčrpanost. Menimo, da je bistvenega pomena zgodnje prepoznavanje znakov anksioznosti ter odkrivanje stresorjev, ki povzročajo anksioznost, kar onemogoča, da bi anksioznost prerasla v motnjo. Potrebno je skrbeti za zdrava delovna okolja zaposlenih v zdravstveni negi, da bodo lahko nudili kakovostno in varno okolje ter zdravstveno nego pacientov.

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