

# WELL-BEING AND SATISFACTION OF NURSES IN SLOVENIAN HOSPITALS: A CROSS-SECTIONAL STUDY

## POČUTJE IN ZADOVOLJSTVO MEDICINSKIH SESTER V SLOVENSkih BOLNIŠNICAH: PRESEČNA RAZISKAVA

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### ABSTRACT

**Introduction:** Well-being is one of the most important factors in whether nurses decide to remain in the nursing profession. This study aims to examine well-being and satisfaction among nurses working in Slovenian hospitals and to identify the related demographic factors.

### Keywords:

hospitals, nurses, satisfaction, health

**Methods:** This descriptive cross-sectional study uses standardised instruments. The sample included 640 nurses working in Slovenian hospitals. The difference between individual variables were analysed using the Mann-Whitney and Kruskal-Wallis tests.

**Results:** Nurses self-assessed their satisfaction and well-being as moderate. Forty-seven per cent of nurses were satisfied with their job, 49% assessed their psychological well-being as good, 52% were often exposed to stress at the workplace and 30% were always exposed to stress at the workplace. Levels of job satisfaction ( $p=0.031$ ), psychological well-being ( $p=0.029$ ) and subjective well-being ( $p=0.014$ ) were found to differ significantly according to level of education, while levels of job satisfaction ( $p=0.005$ ), life satisfaction ( $p<0.001$ ), psychological well-being ( $p<0.001$ ) and subjective well-being ( $p<0.001$ ) were also found to differ according to years of nursing service and from hospital to hospital ( $p<0.001$ ).

**Conclusions:** The key finding of the study is that nurses are moderately satisfied with their work and life and that they display moderate levels of psychological and subjective well-being. Hospitals can be successful and achieve the goals of the organisation if their employees are satisfied with work and enjoy good levels of well-being. Hospital management have to recognise the importance of ensuring that nurses and other employees are satisfied and healthy.

### IZVLEČEK

#### Ključne besede:

bolnišnice, medicinske sestre, zadovoljstvo, zdravje

**Uvod:** Počutje medicinskih sester je eden najpomembnejših dejavnikov odločitve, ali ostanejo zaposlene v zdravstvu ali ne. Namen raziskave je bil ugotoviti stopnjo dobrega počutja in zadovoljstva medicinskih sester, ki delajo v slovenskih bolnišnicah, ter prepoznati nekatere povezane demografske dejavnike.

**Metode:** Uporabljena je bila opisna presečna raziskava in standardizirani instrumenti. V vzorec je bilo vključenih 640 medicinskih sester iz slovenskih bolnišnic. Razlike med posameznimi spremenljivkami so bile analizirane s testoma Mann-Whitney in Kruskal-Wallis.

**Rezultati:** Medicinske sestre so samoocenile svoje zadovoljstvo in počutje kot zmerno. 47 % medicinskih sester je zadovoljnih s svojim delom, 49 % pa je svoje psihološko počutje ocenilo kot pozitivno. 52 % medicinskih sester je pogosto in 30 % medicinskih sester je vedno izpostavljenih stresu na delovnem mestu. Glede na stopnjo izobrazbe so bile ugotovljene statistično pomembne razlike v zadovoljstvu z delom ( $p = 0,031$ ), psihološkem ( $p = 0,029$ ) in subjektivnem počutju ( $p = 0,014$ ). Statistično pomembne razlike so bile ugotovljene pri zadovoljstvu z delom ( $p = 0,005$ ), zadovoljstvu z življenjem ( $p < 0,001$ ), psihološkem ( $p < 0,001$ ) in subjektivnem počutju ( $p < 0,001$ ) glede na leta delovnih izkušenj v zdravstveni negi in upoštevajoč različne bolnišnice ( $p < 0,001$ ).

**Zaključki:** Ključna ugotovitev raziskave je zmerno zadovoljstvo z delom in življenjem ter zmerno dobro psihološko in subjektivno počutje medicinskih sester. Bolnišnice so lahko uspešne in dosegajo organizacijske cilje, če so tudi medicinske sestre zadovoljne z delom in se dobro počutijo. Vodstvo v bolnišnicah mora prepoznati pomen skrbi za zadovoljne in zdrave medicinske sestre ter tudi ostale zaposlene v bolnišnici.

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## 1 INTRODUCTION

Healthcare systems face a shortage of nurses and increasing demands for patient care (1). The work-related demands on nurses are high (2) and their work is emotional and physically demanding (3). Nursing is becoming an increasingly stressful occupation (4), with nurses having to ensure high standards of quality and handle complex situations effectively (5).

In the workplace context, the concept of well-being has different meanings across organisations and countries. While there are many definitions of well-being, there are two main concepts, as measured by subjective and psychological well-being. There is no significant degree of differentiation between the definitions of the two concepts, with both sharing a similar conceptual structure (6). Subjective well-being is the subjective assessment of life satisfaction, and is a combination of the individual's positive and negative moods and emotions (7). At the same time, some authors (7) have noted that subjective well-being is multidimensional, that it is subject to cultural differences, and that it has beneficial effects on health and social relationships. Psychological well-being is equated with positive human functioning and defined by six factors: accepting oneself, mastering the environment, positive relationships, personal growth, purpose in life, and autonomy. The psychological well-being model has been used to study relationships between well-being and personality traits, mental and physical health, healthy ageing, family and occupational experiences, and neurological processes (8).

Well-being is one of the most important factors in whether nurses decide to remain in the profession (9), as well as on nurses' engagement with work and on burnout beyond the effects of quantitative job demands and control (10). Employees are characterised as enjoying good well-being when they are satisfied with their work and organisation (11) and are more committed and affiliated (12). People with good well-being are more optimistic, more resilient to problems, and have a stronger belief in their ability to handle things (13). Some studies (14-16) have found that nurses' psychological distress and well-being could impact on quality of care and patient safety.

Life satisfaction is a general assessment of emotions and attitudes about an individual's life at a certain point. It constitutes the judgement that a person makes about their life, and it is the most extensive construct for assessing subjective well-being (17). Greater life satisfaction is associated with organisational results, such as greater career satisfaction, organisational commitment and job satisfaction (18). Most definitions of job satisfaction tend to focus on how employees feel and think about their work. These definitions are very similar to those of life satisfaction, and involve emotional states, feelings,

affective responses and cognitive evaluations of work (19). The basic condition for the successful management of employees in an organisation is reflected in support of high motivation and the satisfaction of employees at different ages (20). Research has shown that job satisfaction is associated with productivity (21), quality of patient care (22) and reduced staff turnover (23).

Given the great importance of monitoring and ensuring employees' well-being, which is associated with many positive outcomes for the individual (12, 13), for the organisation (9, 10) and for the patient (14-16), we decided that the study would aim to examine well-being and satisfaction among nurses in Slovenian hospitals and to identify the related demographic factors. While some studies carried out in various healthcare organisations have examined nurses' job satisfaction, there has not yet been a study of the factors determining nurses' psychological and subjective well-being in Slovenia.

## 2 METHODS

### 2.1 Study and Data Collection

A descriptive cross-sectional study was used. All Slovenian public hospitals with internal medicine and surgical departments were invited to participate in the study (N=12). Eight hospitals confirmed participation. The study included a convenience sample: nurses who had completed secondary education or higher, and who worked at internal or surgical departments in eight Slovenian hospitals. According to the Health Statistical Yearbook (24), which is the Slovenian statistical yearbook for health, a total of 8,787 nurses work in Slovenian hospitals. According to information supplied by the management of the participating hospitals, 3,402 nurses were working at internal medicine and surgical departments. To ensure a representative sample that accurately reflected the characteristics of the study group, we decided to include 30% of all nurses from the participating hospitals. A total of 1,100 (32%) questionnaires were distributed: 85 were sent to mid- and unit-level head nurses and 1,015 were sent to other nursing staff. Questionnaires for head nurses were sent only to those who occupied a leading position in a department or unit, i.e. purposive sampling was used. A total of 1,100 hospital nurses received an invitation for participation, instructions, a guarantee of anonymity, and an envelope with a stamp and a return address (that of the researcher). The response rate was 58% (640), which represents 18.8% of the nurses working at the hospitals included in the study.

### 2.2 Measures

The structured questionnaire included demographic questions (gender, level of education (secondary; high, university/master level); job position (leader, other

employees)) and 115 questions related to job and life satisfaction, basic need satisfaction, and psychological and subjective well-being. Job satisfaction was determined by 15 items (25) and related to different dimensions of the work environment and the characteristics of work. Items were rated on a six-point Likert scale. The scale points were: 1 “completely unsatisfied”, 2 “unsatisfied”, 3 “slightly unsatisfied”, 4 “slightly satisfied”, 5 “satisfied” and 6 “completely satisfied”. The sum of the scores created an overall image of job satisfaction, with higher scores indicating a higher level of job satisfaction. The sum of whole scale ranged from 15 to 90. Cronbach’s alpha was 0.943. The satisfaction of participants’ basic needs was assessed using the Deci and Ryan Basic Need Satisfaction questionnaire (26). The questionnaire contains 21 items related to three dimensions of subjective well-being: competency (Cronbach’s  $\alpha$  0.942), autonomy (Cronbach’s  $\alpha$  0.963) and relatedness (Cronbach’s  $\alpha$  0.967). Items were rated on a six-point Likert scale. The scale points were: 1 “completely disagree”, 2 “disagree”, 3 “slightly disagree”, 4 “agree”, 5 “agree” and 6 “completely agree”. The sum of the scores created an overall image of a person’s experiences of the satisfaction of three needs (autonomy, competence, relatedness). Higher scores indicated higher levels of basic need satisfaction. The sum of the whole scale ranged from 21 to 126. Cronbach’s alpha was 0.984. Subjective well being was assessed using indicators of subjective well-being: the Positive Affect Negative Affect Schedule (PANAS) (27) and the Satisfaction with Life Scale (28). PANAS was designed to assess the affective dimension of subjective well-being, and consists of ten positive and ten negative moods in the past month. Items were rated on a six-point Likert scale. The scale points were: 1 “not at all/never”, 2 “slightly”, 3 “a little”, 4 “moderately”, 5 “quite a bit” and 6 “very much/extremely”. On the positive and negative mood scale, the scores ranged from 10 to 60, with higher scores representing a higher level of positive/negative affect. Cronbach’s alpha was 0.944 for positive affect and 0.646 for negative affect. Participants evaluated their satisfaction with life using the Satisfaction with Life Scale Five items were rated on a six-point Likert scale. The scale points were: 1 “completely disagree”, 2 “disagree”, 3 “slightly disagree”, 4 “slightly agree”, 5 “agree” and 6 “completely agree”. The sum of the scores created an overall image of life satisfaction, with higher scores indicating a higher level of life satisfaction. The sum of the whole scale ranged from 5 to 30. Cronbach’s alpha was 0.956. Subjective well-being is measured as a “sum of life satisfaction plus positive affect minus negative affect” (29). Higher scores indicated a higher level of subjective well-being. The sum of the whole scale ranged from 5 to 30. Psychological well-being was assessed using the Psychological Well-Being Scale (30). The questionnaire contains 54 items. Nine statements relate to each of the six dimensions of psychological well-being: accepting

oneself (Cronbach’s  $\alpha$  0.978), positive relationships with others (Cronbach’s  $\alpha$  0.951), autonomy (Cronbach’s  $\alpha$  0.969), environmental management (Cronbach’s  $\alpha$  0.957), meaning of life (Cronbach’s 0.929) and personal growth (Cronbach’s 0.919). Items were rated on a six-point Likert scale. The scale points were: 1 “completely disagree”, 2 “disagree”, 3 “slightly disagree”, 4 “slightly agree”, 5 “agree” and 6 “completely agree”. The sum of the scores created an overall image of psychological well-being, with higher scores indicating a higher level of psychological well-being. The sum of the whole scale ranged from 54 to 324. Cronbach’s alpha was 0.991. For better understanding average values transformed the ratio variable into categorical. Six possible ratings were transformed into two categories. In the first category combined ratings 1, 2 and 3 related to dissatisfaction/disagreement, while into the second category combined 4, 5 and 6, which related to satisfaction/agreement. The Slovenian version of all the English-language questionnaires was developed using a translation-back-translation procedure. The English-language version was translated into Slovenian and then back-translated blindly into English by a Slovenian translator. The Slovenian translator then checked the equivalence of the English version of the instruments. The items of the Slovenian instrument were formulated with the same contents as the items in the original instrument. Four nurses and four head nurses held group conversations to verify whether the Slovenian version of the questionnaires was appropriate. They were asked to complete the instrument and to identify those items whose content was unclear. This check revealed a need for several items to be clarified.

### 2.3 Statistical Analysis

Univariate and bivariate analyses were used. The partial and final scores were compared to the total score of each questionnaire. A Kolmogorov-Smirnov test confirmed the impression from a visual inspection that the scores for all studied variables was not normally distributed ( $p < 0.001$ ). Results were presented via the Median (Med) and interquartile range (IQR). Differences between individual variables were analysed using the Mann-Whitney and Kruskal-Wallis tests. A p-value of  $< 0.05$  was considered to be statistically significant. All the analyses were conducted using SPSS (Statistical Package for Social Sciences Program), version 24.0.

### 3 RESULTS

A total of 640 nurses took part in the study: 346 (54%) from surgical departments and 294 (46%) from internal medicine departments. A total of 153 nurses (24%) were under 30, 410 (64%) were between 30 and 50, and 77 (12%) were over 50. The average age was 40.6 years. Forty nurses (7%) had less than 5 years' experience in nursing, 134 (21%) had 5-10 years' experience, 218 (33%) had 11-20 years' experience, 128 (20%) had 21-30 years' experience, and 120 (19%) had more than 31 years' experience. Twenty-six per cent (163) had one or more chronic non-communicable diseases, 18% (110) were sometimes exposed to stress, 52% (334) were often exposed to stress, 30% (194) were always exposed to stress at the workplace, and 82% (525) self-assessed that they managed stress. Nurses' assessed their job satisfaction (Med=45; IQR=36) and life satisfaction (Med=15; IQR=16) as moderate. Their psychological (Med=146; IQR=106) and subjective well-being (Med=18; IQR=14) was also moderate. 47% of nurses were satisfied with their job, 51% were satisfied with their life, 49% assessed their psychological well-being as good, and 47% assessed their subjective well-being as good.

The percentage of those who were always exposed to stressful situations rose with level of education from 37.9% to 47.1%, as did job satisfaction (Med=40; IQR=36 to Med=49; IQR=34), life satisfaction (Med=15; IQR=16 to Med=16; IQR=14), basic need satisfaction (Med=61; IQR=67 to Med=83; IQR=53) psychological well-being (Med=130; IQR=108 to Med=197, IQR=88) and subjective well-being (Med=17; IQR=15 to Med=20; IQR=12). Levels of exposure to stress ( $p<0.001$ ), job satisfaction ( $p=0.031$ ), psychological well-being ( $p=0.023$ ) and subjective well-being ( $p=0.014$ ) were found to differ significantly according to level of education (Table 1).

The proportion of those who estimated that their work was always stressful increased in line with years of nursing service from 11.1% to 39.4%, while the proportion of those who managed stress fell from 85.5% to 76%. Life satisfaction (Med=24; IQR=13 to Med=11; IQR=15), job satisfaction (Med=54; IQR=18 to Med=41; IQR=40), psychological well-being (Med=211; IQR=44 to Med=121; IQR=92), subjective well-being (Med=25; IQR=18 to Med=13; IQR=16) and basic need satisfaction (Med=100; IQR=50 to Med=51; IQR=60) all decreased with years of service. Statistically significant differences in levels of exposure to stress ( $p=0.003$ ), life satisfaction ( $p<0.001$ ), job satisfaction ( $p=0.005$ ), psychological well-being ( $p<0.001$ ) and subjective well-being ( $p<0.001$ ) were found in relation to years of service (Table 2).

Table 1. Differences according to level of education.

Variables/level of education	Secondary Med (IQR)	High Med (IQR)	University/ Master's Med (IQR)	Kruskal-Wallis H	p
Exposure to stress (range from 1 to 4)	2.5(1)	2.5(1)	3.5(2)	25.021	<0.001
Job satisfaction (range from 1 to 6)	40(36)	40(36)	49(34)	10.306	0.031
Life satisfaction (LS) (range from 1 to 6)	15(16)	15(16)	16(14)	8.006	0.091
Psychological well-being (range from 1 to 6)	130(108)	130(108)	197(88)	10.489	0.023
Basic need satisfaction (range from 1 to 6)	61(67)	61(67)	83(53)	7.763	0.092
Subjective well-being (range from 1 to 6)	17(15)	17(15)	20(12)	12.420	0.014

Legend: Med - median; IQR - interquartile range; p - statistical significance

Table 2. Differences in relation to years of service.

Variables/years of service	<5 Med (IQR)	6-10 Med (IQR)	11-20 Med (IQR)	21-30 Med (IQR)	>30 Med (IQR)	Kruskal- Wallis H	p
Exposure to stress	3(1)	3(1)	3(0)	3(1)	4(1)	16.763	0.003
Job satisfaction	54(18)	50(30)	48(36)	44(32)	41(40)	17.945	0.005
Life satisfaction	24(13)	22(14)	18(15)	15(14)	11(15)	28.492	<0.001
Psychological well-being	211(44)	196(108)	167(104)	134(173)	121(92)	28.536	<0.001
Basic need satisfaction	100(50)	90(61)	82(58)	63(58)	51(60)	23.994	<0.001
Subjective well-being	25(18)	22(14)	20(14)	16(13)	13(16)	30.663	<0.001

Legend: Med - median; IQR - interquartile range; p - statistical significance

While women rated their life satisfaction (Med=15; IQR=16), job satisfaction (Med=45; IQR=36), basic need satisfaction (Med=68.5; IQR=60), psychological well-being (Med=146.5; IQR=108) and subjective well-being (Med=18; IQR=14) higher than men, the differences were not significant (Table 3). More women than men (32% vs. 27%) assessed that they were always exposed to stress, and 89% of men and 79% of women self-assessed that they managed stressful situations. Significant differences in terms of gender were only found in the management of managing stressful situations ( $Z=-1.955$ ;  $p=0.048$ ).

Head nurses assessed that their work was always stressful in 37.3% of cases (other nurses in 29.4% of cases), while of 84% of head nurses and 78% of other nurses assessed that they managed stressful situations. Head nurses rated their job satisfaction (Med=60; IQR=13), life satisfaction (Med=20; IQR=7), basic need satisfaction (Med=91; IQR=35), psychological well-being (Med=181; IQR=66) and subjective well-being (Med=22; IQR=5) higher than other nurses. Significant differences in relation to job position were identified only in job satisfaction ( $p<0.001$ ) and subjective well-being ( $p=0.003$ ) (Table 4).

Table 3. Differences according to gender.

Variables/gender	Female Med (IQR)	Male Med (IQR)	Mann- Whitney U	Z	p
Exposure to stress	3(1)	3(1)	22975	0.598	0.550
Job satisfaction	45(36)	35(36)	22199	1.082	0.279
Life satisfaction	15(16)	13(16)	21683	1.307	0.191
Psychological well-being	146(108)	133(105)	19836	1.280	0.201
Basic need satisfaction	68.5(60)	57.5(64)	21141	0.777	0.437
Subjective well-being	18(14)	15.5(16)	20959	1.489	0.136

Legend: Med - median; IQR - interquartile range; p - statistical significance

Table 4. Differences in relation to job position.

Variables/job position	Other nurses Med (IQR)	Head nurses Med (IQR)	Mann- Whitney U	Z	p
Exposure to stress	3(1)	3(1)	20193	-0.676	0.499
Job satisfaction	40(35)	60(13)	11469.5	-6.460	<0.001
Life satisfaction	15(16)	20(7)	19028.5	-1.190	0.234
Psychological well-being	137(114)	181(66)	16666.5	-0.333	0.739
Basic need satisfaction	63(64)	91(35)	18733	-0.614	0.539
Subjective well-being	16(15)	22(5)	15637	-2.966	0.003

Legend: Med - median; IQR - interquartile range; Z - test value; p - statistical significance

Nurses with a chronic non-communicable disease assessed their work as stressful in 41% of cases (26% of cases for those without a chronic non-communicable disease). Nurses with a chronic non-communicable disease rated their satisfaction with life (Med=12; IQR=16), job satisfaction (Med=36; IQR=59), basic need satisfaction (Med=56; IQR=59), psychological well-being (Med=122.5; IQR=95) and subjective well-being (Med=14.5; IQR=15) lower than those without a non-communicable chronic disease. Significant differences between nurses with and without a chronic non-communicable disease were found in relation to exposure to stress ( $p=0.002$ ), job satisfaction ( $p=0.029$ ), life satisfaction ( $p=0.001$ ), psychological well-being ( $p=0.049$ ), basic need satisfaction ( $p=0.019$ ) and subjective well-being ( $p=0.003$ ) (Table 5).

**Table 5.** Differences in relation to presence of chronic disease.

Variables/chronic disease	Without Med (IQR)	With Med (IQR)	Mann-Whitney U	Z	p
Exposure to stress	3(1)	3(1)	33230	-3.168	<b>0.002</b>
Job satisfaction	45.5(36)	36(59)	34795.5	-2.182	<b>0.029</b>
Life satisfaction	17.5(15)	12(16)	32395	-3.220	<b>0.001</b>
Psychological well-being	168(108)	122.5(95)	30728.5	-1.945	<b>0.049</b>
Basic need satisfaction	80(61)	56(59)	31634.5	-2.355	<b>0.019</b>
Subjective well-being	19.5(13)	14.5(15)	31610	-3.016	<b>0.003</b>

Legend: Med - median; IQR - interquartile range; Z - test value; p - statistical significance

The proportion of employees who self-assessed that they were always exposed to stress and that they managed their stressful situations varied from hospital to hospital (between 9% and 53% and between 70 and 92% respectively). Again varying from hospital to hospital, nurses' assessment of life satisfaction ranged from Med=11(IQR=8) to Med=25(IQR=5), assessment of subjective well-being between Med=13.5(IQR=16) to Med=25(IQR=4.7), assessment of job satisfaction between Med=30(IQR=23) to Med=64(IQR=10), assessment of basic need satisfaction between Med=50(IQR=37) to Med=112(IQR=6) and assessment of psychological well-being between Med=116(IQR=36) to Med=222(IQR=35). Significant differences were found between hospitals in relation to exposure to stress ( $p<0.001$ ), job satisfaction ( $p<0.001$ ), life satisfaction ( $p<0.001$ ), psychological well-being ( $p<0.001$ ), basic need satisfaction ( $p<0.001$ ) and subjective well-being ( $p<0.001$ ).

#### 4 DISCUSSION

The key finding of this study is that nurses in Slovenian hospitals are moderately satisfied with their work and life, and also display moderate levels of psychological

and subjective well-being. While other studies (31, 32) have also found nurses' psychological well-being to be moderate, Bourgault et al. (33) found low well-being among emergency nurses, as did Atanes et al. (34) among nurses at primary level and Oates et al. (35) among mental health nurses. In contrast to our results (Med=146; IQR=106), high well-being was identified (36) among mental health workers ( $285.6\pm 41.7$ ) and also non-health workers ( $269.7\pm 44.07$ ) in Australia.

Female nurses experienced higher psychological and subjective well-being, which is comparable with study (37). As in other studies (38, 39), no statistically significant gender-related differences were found. Results showed that nurses were often (and some of them always) exposed to stress, which is in line with other studies (34, 40). Karimi et al. (41) noted that nurses' predicted well-being was an important factor in stress-related presenteeism.

Nurses with less than five years' nursing experience had the highest levels of job and life satisfaction (self-assessed), as well as the highest psychological and subjective well-being, compared to nurses with more years of nursing experience. Nurses' well-being decreased with years of service, which is in line with study (36). However, study (37) found that well-being increased with years of service.

It was found that head nurses were more satisfied with their job than other nurses, and that job satisfaction decreased with years of service, which is in line with other studies (42, 43). Some studies (42-44) have also found that nurses have moderate levels of job satisfaction. Our findings regarding differences in well-being connected to job position and years of service accord with other studies (33, 34).

Differences in job satisfaction, psychological and subjective well-being were found to be conditioned by level of education, i.e. nurses with a higher level of education were more satisfied with their job. This is in line with other studies (45, 46). Moreover, job satisfaction is positively associated with greater self-efficacy (47), engagement with work (48), occupational health (4) and job performance (21) on the part of nurses. There is also evidence of an association between nurses' job satisfaction and patient satisfaction (48-50). In addition to stress, job satisfaction is also strongly associated with general health (4, 51, 52). Nurses who suffered from a chronic non-communicable disease rated their job satisfaction, life satisfaction, psychological well-being and subjective well-being lower than nurses who did not suffer from such diseases. Study (53) found that satisfaction with life and health was conditioned by the presence of chronic disease, with poor levels of life satisfaction being linked to undesirable health outcomes, including the elevated risk of chronic disease and death (54).

Differences in the level of nurses' satisfaction and well-being from hospital to hospital can be explained by the results of other studies, which highlighted differences in organisational culture (55), organisational support (56) and leadership style (14). It is important for management to realise that well-being is of great importance not only to employees, as it promotes better health, positive self-esteem, better relationships with other people and resilience (7, 57), but also to the organisation (11, 12). Some studies (14-16) have found a significant relationship between nurses' well-being and the quality of patient care - for example, Hall et al., in the systematic review contained in (58), found that 16 of the 27 studies established a significant correlation between poor well-being and reduced patient safety. As they have a serious impact on work productivity, patient care, staff efficiency and turnover rates, the relationships between work-related stress, job satisfaction, well-being and the general health of nurses need to be better understood (4).

Well-being is important for nurses, who face the challenge of balancing job stress and patient care outcomes without succumbing to emotional exhaustion. The results were presented to the management of each participating hospital in line with the interest they expressed, with the results from the specific hospital also being presented in relation to the overall results. With this, hospital

management is able to identify the "real" situation and to try to recognise the importance of monitoring employees' job satisfaction and well-being for better employee health and the achievement of better outcomes. The practical implications of the results suggest that interventions designed to promote positive well-being may help improve nursing environments, which in turn may result in improved approaches to safety and quality and improved nursing outcomes.

Although these findings are notable, several limitations should be acknowledged. It is noteworthy that the study was cross-sectional rather than longitudinal. While the sample is not balanced in terms of nurses' educational achievements and gender, this does reflect the actual structure of nursing in Slovenian hospitals. The researcher was not available during the research process in the participating hospitals, which meant that the respondents did not receive assistance if they did not understand an item and were not able to obtain additional explanations. It is possible that the respondents were overly positive or negative with regard to satisfaction and well-being. We therefore have to be careful when generalising the findings. Future research should examine longitudinally the possible interaction between well-being, the nursing practice environment and patient safety outcomes.

## 5 CONCLUSION

The key finding of this study is that nurses in Slovenian hospitals are moderately satisfied with their work and life, and display moderate levels of psychological and subjective well-being, and that the differences are conditioned by level of education, years of service, the presence or otherwise of chronic disease and the organisation in which they work. In a constantly changing health system, hospital management have to recognise the importance of satisfied and healthy employees. Hospitals can be successful and achieve the goals of their organisations if employees are satisfied with their work and enjoy positive well-being. Management policies and practices that aim to implement changes to improve employees' well-being need to be focused on enhancing nurses' well-being so that nurses remain in the profession in greater numbers. Employers must monitor job satisfaction and take periodic steps to ensure well-being and health - indeed, this is the only way that organisations can adapt to the individual and achieve greater efficiency and better quality.

Poor well-being associated with poorer patient safety has significant implications for policy-makers and management in healthcare settings. Healthcare organisations must provide a work environment that fosters nurses' well-being and safeguards against burnout, thus ensuring that patients are provided with a safe service.

Positive Organisational Psychology suggests that employees' health is an important goal in itself and one that management should include in its organisational policy. When establishing the level of job satisfaction, well-being and health, we must focus on how employees feel about their work and about personal relationships at the workplace, and on the way management has an impact on employees.

## CONFLICTS OF INTEREST

The authors declare that no conflicts of interest exist.

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## ETHICAL APPROVAL

Research includes human data processed in accordance with the Declaration of Helsinki and approved by the National Medical Ethics Committee of the Republic of Slovenia (No 157/09/13). Before the interviews, the nature and the purpose of the study were explained and participants were informed that participation in the study was voluntary and anonymous. Participants gave their verbal consent before the study. The design of the study and the interviews with prior verbal consent were approved by the National Medical Ethics Committee of the Republic of Slovenia.

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