



Transition Shock of Newly Employed Nurses: A Cross-sectional Study

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Abstract

BACKGROUND: The process of transitioning from the role of a student to the role of a professional in nursing is a very stressful and can cause job dissatisfaction and the intent to leave the profession.

AIM: This study aimed to examine the incidence of transition shock among newly employed nurses.

METHODS: A total of 43 newly employed nurses fill out the questionnaire *Environmental Reality Shock-Related Issues and Concerns* to assess transition experience, stress self-assessment, support, and job satisfaction. The Mann–Whitney and Kruskal–Wallis tests were applied to determine the difference in the level of transition shock according to the sociodemographic variables, stress-self-assessment, and job satisfaction and support.

RESULTS: A significant difference in the level of transition shock was recorded in the length of waiting for employment in the expectation ($p = 0.020$), and private life factor ($p = 0.026$), the intention to leave the profession in the relationship ($p = 0.016$), and expectation factor ($p = 0.044$). The level of transition shock was different with regard to dealing with stress ($p = 0.047$), job satisfaction ($p = 0.027$), and the level of support from colleagues ($p = 0.012$), and superiors ($p = 0.026$).

CONCLUSION: The lower job satisfaction, lower support, and weaker coping with stress of newly employed nurses increase the transition shock during the 1st year. These results can be useful for managers of health institutions to plan specific activities aimed at reducing the level of transition shock, especially at this time of pronounced shortages of nurses worldwide.

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Introduction

Around the world, the past decade in health-care systems has been marked by challenges caused by the abandonment of the profession by all healthcare workers' profiles [1]. Nurses are the largest group of healthcare workers, and their role is crucial in the health system. Despite that, an increasing number of nurses are abandoning their profession [2], which worries employers in the healthcare sector [3]. The shortage of nurses is causing many difficulties [1], and the need for nurses is increasing every day [4], [5]. Many authors associate the departure of nurses from the profession with the occurrence of a transition shock, the so-called reality shock, which appears at the beginning of a professional career [6], [7].

The reality shock theory focuses on the need for socialization of nurses in the new work environment, and four phases are described: the honeymoon phase, the rejection/regression phase, the recovery phase, and the resolution phase [8]. The transition experience of new graduate nurses is a very stressful and complex period of adaptation, which can cause job dissatisfaction and the intent to leave the profession [7]. Although the

phenomenon of transition shock was recognized in the 1970s, it is certainly far more pronounced today due to the rapid progress of technology and the complexity of providing nursing care. Some nurses experience an effective transition between roles and become competent and confident professionals, while some newly employed nurses experience burnout due to an ineffective transition, which may result in leaving the profession [8]. According to Graf *et al.* transition shock is manifested through the emotions that nurses experience at the beginning of work and consists of emotional, physical, and sociocultural “feedback” that the nurse exhibits when experiencing an unexpected or negative event in unknown environment [9].

The most common reasons for leaving the profession are dissatisfaction due to excessive workload and/or dissatisfaction with management by superiors, and the reason that has been mentioned more and more recently is that newly employed nurses experience a mismatch between their expectations and reality in practice [10]. Further, numerous challenges arise from the mismatch between theory and practice, a lack of practical skills, and complex interpersonal relationships [11]. The rapid advancement of technology and complex health care makes the process of

transitioning from the role of a student to the role of a medical professional even more demanding [12]. In the first 12 months of work, a newly employed nurse faces a series of emotional, intellectual, physical, and sociocultural challenges [13], and it is precise during this period that thoughts about leaving the profession and even actually leaving are most common [14]. Therefore, the expected shortage of nurses in the future contributes to the worrying rate of leaving the profession as young, newly employed nurses [15].

The abandonment of the profession by young and newly employed nurses directly reflects the impossibility of providing quality and safe healthcare for patients [16]. This reason points to the need for further research into the adjustment process that nurses go through after employment and to the need to develop so-called transition programs, which are considered the best solution in the fight against the negative consequences that this process leaves behind.

To the best of our knowledge, this is the first study about transition shock in newly employed nurses in our region. According to the previous findings, we assume that newly employed nurses experienced transition shock in the 1st year of the length of service. This research aimed to examine the incidence of transition shock among newly employed nurses and examine whether there are differences in the level of transition shock regarding the respondent's general and employment characteristics, intention to leave the profession, and concerning level of self-assessment of job satisfaction and, the level of support from colleagues and superiors, and self-assessments of dealing with stress and self-satisfaction.

Materials and Methods

Study design

A cross-sectional study was conducted from October 22, 2021, to November 22, 2021.

Sample

Nurses who established employment in the past 12 months were recruited from General Hospital Zadar. A total of 43 nurses employed at the General Hospital met the specified inclusion criteria and participated in the research. The criteria for the inclusion of respondents were as follows: (a) completion of high school, bachelor's, or master's nursing education, (b) a relationship (for a definite or indefinite period) at the General Hospital 12 months back from the beginning of the research, and (c) no previous work experience in nursing health care. The average age of the respondents was 22 years (standard deviation =

2.61) with a range of 19–30 years.

Instruments

A survey questionnaire was used in the research. The first part of the questionnaire related to the general and sociodemographic characteristics of the respondents, such as age, gender, level of education, and marital status, employment characteristics, intention to leave the profession, job satisfaction assessment scale, level of support from colleagues, and superiors, and self-assessments of dealing with stress and self-satisfaction. Answers to the questions were given on a Likert scale from 1 to 5, from the worst 1 to the best 5. The second part of the questionnaire consists of *Environmental Reality Shock-Related Issues and Concerns* [17]. The *Environmental Reality Shock-Related Issues and Concerns* instrument consists of 22 questions that make up a total of 5 factors: *roles, relationships, expectations, private life, and performance*. The role factor describes nurses' perceptions of their knowledge, skills, and abilities. It also refers to the level of readiness that they feel to meet expectations on the job. The relationship factor describes the perception of newly employed nurses about the quality of relationships with colleagues at work, and the perceived level of support they receive, as well as feedback on their work. The expectation factor refers to the level to which the work environment met the expectations of newly employed nurses, while the private life factor describes the nurses' perception of the balance between work and private life, and whether their private life suffers consequences due to physical fatigue caused by work. Finally, the performance factor describes the perception of nurses regarding their self-confidence and independence as professionals [12]. Answers to the questions were given on a Likert scale from 1 to 4, where 1 means "I am not worried" and 4 means "I am very worried." Overall, higher values correspond to a higher level of transition shock, and vice versa. Before conducting the research, the questionnaire was translated from English into Croatian by two independent persons according to the current protocol, and then the final version of the instrument was re-translated into the original English language [18]. The reliability of the questionnaire in an earlier study was $\alpha = 0.91$ [12], and in this study, the reliability of the questionnaire was $\alpha = 0.91$.

Data collection

Due to the epidemiological situation related to the COVID-19 pandemic, the questionnaire was distributed online through the Google Forms service. Respondents received the link to the study aim, purpose, and questionnaire through their personal E-mail addresses, and they were downloaded from the Human Resources Department of General Hospital.

By selecting the “I agree” option before filling out the questionnaire, each respondent confirmed that they are fully familiar with the details of the research, gave their informed consent to participate in the research, and confirmed that they are participating in it without coercion.

Data analysis

Descriptive statistics for nominal variables are presented as percentages, and numerical data with basic measures of average value and dispersion, depending on the data distribution. The normality of the distribution of numerical variables was tested with the Kolmogorov–Smirnov test. Dependent variables did not follow a normal distribution; therefore, non-parametric statistical procedures were used to examine differences. The Mann–Whitney test and Kruskal–Wallis test were used to examine the difference in the level of transition shock concerning independent variables. Before processing the collected data, the factor structure of the applied instrument was examined, and reliability was checked with the Cronbach alpha coefficient (Supplementary Table 2). Statistical data processing was done in the Statistica 13 computer application program (TIBCO Software Inc., 2017), and the significance criterion of $p < 0.05$ was used.

Ethics approval

The conduct of this research was approved by the Ethics Committee of General Hospital Zadar at the 34th session held on September 15, 2021, Reg. number: 02-5901/21-5/21.

Results

In this study, 39 females (90.7%), and four men (9.3%) participated. More than half of the respondents (55.8%) were generally high school nurses. Most respondents (74.4%) declared that they were single, and most of them (76.7%) have fixed-term contracts with the hospital. They generally waited <6 months for employment, but they do not work in the department where they would like to. None of the participants has the intention to leave the profession in the next 12 months. The detailed respondents' characteristics are shown in Table 1.

The total level of transition shock was $Me = 2.04$ (1.59–2.31). The highest level of transition shock was recorded in the relationship factor, while the lowest level was recorded in the performance factor (Table 2).

No difference was recorded in the level of transition shock among respondents concerning

Table 1: Characteristics of respondents (n = 43)

Variable	n (%)
Gender	
Female	39 (90.7)
Male	3 (9.3)
Education level	
High school	24 (55.8)
Bachelor	19 (44.2)
Marital status	
Marital or common-law union	11 (25.6)
Single	32 (74.4)
Have children	
Yes	2 (4.7)
No	41 (95.3)
Type of employment contract	
Fixed term contract	33 (76.7)
Permanent contract	10 (23.3)
Time of waiting for employment (months)	
< 6	36 (83.7)
From 6 to 9	4 (9.3)
> 12	3 (7.0)
I work in the desired department	
Yes	11 (25.6)
No	32 (74.4)
Length of service (months)	
From 1 to 4	21 (48.8)
From 5 to 8	7 (16.3)
From 9 to 12	15 (34.9)
Intention to leave the nursing profession in the next 12 months	
Intention	0
No intention	43 (100)
Intention to leave the nursing profession in the future	
Intention	8 (18.6)
No intention	35 (81.4)

gender and level of education. In single respondents, a significantly higher level of transition shock ($p = 0.007$) was recorded in the performance factor. Participants who waited for employment for 6–9 months expressed a higher level of transition shock in the expectations factor ($p = 0.020$), while the level of transition shock in the private life factor was significantly higher in participants who waited for employment longer than 12 months ($p = 0.026$). Participants who expressed their intention to leave the profession in the future had a significantly higher level of transition shock in the relationships ($p = 0.016$), and expectations factor ($p = 0.044$), as well as a generally higher level of transition shock ($p = 0.047$) than those who have no intention of leaving the profession. In general, the level of transition shock ($p = 0.047$), as well as the level in the performance dimension ($p = 0.007$), was lower if the more effective coping with stress was. A higher level of job satisfaction and support received from colleagues and superiors meant a lower level of transition shock in general and in all factors except Roles (Table 3 and Supplementary Table 1).

Table 2: The levels of transition shock (n = 43)

Factors	Minimum	Maximum	Median (25%–75%)
Role	1	3.8	2.00 (1.60–2.40)
Relationship	1	3.75	2.25 (1.50–2.75)
Expectation	1	3	2.00 (1.40–2.40)
Private life	1	4	2.00 (1.50–3.00)
Performance	1	3.66	1.66 (1.00–2.66)
Total	1	3.27	2.04 (1.59–2.31)

Referent value of transition shock (minimum to the maximum 1–5).

Discussion

This cross-sectional study that examined the incidence of transition shock among newly employed

Table 3: Differences in the level of transition shock regard represent characteristics (n = 43)

Variable	Roles		Relationship		Expectations		Private life		Performance		Transition shock total	
	Average rank	p	Average rank	p	Average rank	p	Average rank	p	Average rank	p	Average rank	p
Gender												
Male	22.25	0.585*	20.13	0.752*	21.75	0.966*	20.63	0.814*	21.63	0.949*	22.63	0.917*
Female	21.67		22.19		22.03		22.14		22.04		21.94	
Education level												
High school	19.52	0.143*	20.63	0.417*	19.90	0.213*	22.48	0.744*	20.00	0.234*	20.17	0.282*
Bachelor	25.13		23.74		24.66		21.39		24.53		24.32	
Marital status												
Single	22.69	0.555*	21.30	0.537*	21.03	0.401*	21.25	0.519*	24.98	0.007*	22.25	0.837*
Marital or common-law union	20.00		24.05		24.82		24.18		13.32		21.27	
Waiting for employment (months)												
<6	21.06	0.511**	20.67	0.239**	19.99	0.020**	19.81	0.026**	22.54	0.806**	20.57	0.185**
6–9	28.00		31.25		38.25		31.38		18.88		32.25	
9–12	25.33		25.67		24.50		35.86		19.67		25.50	
Intention to leave the nursing profession in future												
Yes	25.63	0.363*	31.63	0.016*	30.00	0.044*	28.81	0.083*	23.56	0.692*	29.13	0.075*
No	21.17		19.80		20.17		20.44		21.64		20.37	
Dealing with stress-self-assessment												
Very bad	0	0.245**	0	0.092**	0	0.193**	0	0.382**	0	0.007**	0	0.047**
Bad	20.25		31.75		26.75		25.50		23.75		28.25	
Medium	27.03		27.27		26.47		25.83		30.77		28.63	
Good	19.54		18.02		19.56		19.22		16.90		17.92	
Very good	11.50		23.00		6.50		27.00		14.50		12.00	
Job satisfaction												
Not satisfied at all	0	0.405**	0	0.002**	0	0.009**	0	0.028**	0	0.721**	0	0.027**
Not satisfied	21.50		38.17		39.33		40.50		19.67		33.17	
Moderately satisfied	27.08		28.92		28.08		26.67		25.08		29.25	
Satisfied	23.11		23.24		21.85		20.07		23.00		22.61	
Very satisfied	17.05		11.23		14.27		18.45		18.86		13.73	
Support received from colleagues												
Very bad	0	0.747**	0	< 0.001**	0	0.019**	0	0.004**	0	0.764**	0	0.012**
Bad	27.33		37.50		30.17		32.83		27.67		35.33	
Medium	23.85		30.62		29.12		27.85		23.00		28.00	
Good	20.83		21.00		20.58		24.04		19.63		20.75	
Very good	20.27		12.23		15.33		13.13		21.90		15.13	
Support received from superiors/leaders												
Very bad	25.50	0.344**	39.00	0.007**	35.25	0.003**	32.00	0.005**	19.50	0.744**	34.00	0.026**
Bad	19.88		31.50		31.13		33.00		18.38		28.63	
Medium	24.32		27.55		29.36		29.86		23.09		27.82	
Good	26.89		21.11		22.11		15.39		26.28		22.94	
Very good	17.65		14.65		13.47		16.65		20.18		14.76	

*Mann-Whitney test, **Kruskal-Wallis test.

nurses is, to the best authors' knowledge, the first such study in our region. The differences in the level of transition shock according to self-stress perception, job satisfaction, and the support of colleagues and leaders were noted. The gender distribution corresponds to the usual gender distribution in Croatian nursing [19], [20], and globally throughout the world [21], [22]. No differences were noted regarding gender in transition shock.

Since no studies were found whose purpose was to examine the incidence of transition shock among newly employed nurses in our or nearby areas, the results were compared with similar studies conducted in other countries around the world. Those countries are more developed than Croatia and have a more developed health-care system equipped with advanced technology, a greater number of nurses compared to the number of patients, and often developed transition programs for newly employed employees. The aforementioned factors are key to successfully overcoming the difference between expectations and reality that manifests itself during the first job [15]. Nevertheless, the results recorded in this research indicate that the level of transition shock among newly employed nurses was lower than in research in the mentioned countries [12], [15], [23], [24]. This recorded result can be explained by the fact that it is the only general hospital in the county, where high school and nursing students complete the majority of clinical

practice, do internships, and then get employed. During clinical practice, students rotate between hospital departments [25], learn about the specifics of work in each of them, cooperate with the team, and learn about the goals, mission, and vision of the hospital, as well as internal procedures and regulations. The assumption is that when they are employed, all of the above facilitates the transition from an educational to a working environment, thus leading to a lower level of transition shock. Furthermore, the research by Kim *et al.* on the influence of student characteristics and work environment on the occurrence of transitions shock, points out that the transition between the above role is easier if teaching during education is effective and of high quality [23].

In this research, none of the respondents expressed the intention to leave the profession in the next 12 months, while one part (18.6%) of the respondents expressed the intention to do so sometime in the future. Earlier research showed that the percentage varies from 8% to 69% during the 1st year of employment, and from 26.2% to 56% during the 2nd year of employment [26]. It was also observed that during the COVID-19 pandemic, the intention of nurses to leave the profession increased by about 5% more compared to the period before the COVID-19 pandemic [27]. Such results are caused, among other things, by an increase in the level of transition shock [28], [29].

The higher average values recorded in the relationships factor possibly indicate that newly employed nurses during their 1st year of employment have the most difficulties in establishing a quality relationship with colleagues at work and with a lack of feedback on their work from superiors. Furthermore, the establishment of a quality relationship with colleagues and the availability of feedback from superiors have been recognized in the previous research as leading factors that can worsen or alleviate the level of transition shock in newly employed nurses [30], [31]. Duchscher claims that in the absence of formal "feedback," newly employed nurses begin to look for other indicators of their performance, which can lead them to incorrect conclusions [14].

The level of experienced transition shock did not differ concerning the gender and education level of the respondents, and the recorded results are consistent with previously conducted research [15], [32]. The highest level of transition shock in the factor expectation was expressed by nurses who had been waiting for employment between 6 and 9 months, and in the factor private life by those who had been unemployed for longer than 12 months. It is possible that a longer period outside the profession caused a higher level of insecurity after they started work, and the private lives of nurses probably suffered due to unemployment. It is possible that such circumstances affected our results.

In this research, no difference was noted in the overall level of transition shock considering the intention to leave the nursing profession in the future, but the difference was noted in the factors of relationships and expectations. These results indicate the importance of the relationship and expectation, which were confirmed in students also, and described in earlier studies [25], [33]. The level of transition shock differed concerning the respondents' ability to face stress. Respondents who assessed their ability to cope with stress as lower experienced a higher level of transition shock. The above is most evident in the performance factor, which was confirmed in Turkey's study during the COVID-19 pandemic [34]. The highest mean values in the performance factor were expressed by respondents who assessed their coping with stress at a medium level, that is, they were uncertain in their assessment. Considering that the performance factor in transition shock refers to the self-confidence and independence of the nurse as a professional [12], high values in this factor indicate that the lack of self-confidence and independence is reflected in uncertainty when assessing one's ability to cope with stress. The respondents' levels of transition shock also differed concerning the level of job satisfaction. In respondents with a lower level of satisfaction, the level of transition shock was higher. The results are contrary to those of Labrague and De Los Santos, who determined that there is no relationship between job satisfaction and the

level of transition shock [15]. However, Kim *et al.*, in a longitudinal study that examined changes in the level of transition shock and job satisfaction during the 1st year of employment, state that they were connected [35]. Moreover, the obtained results indicated that the level of transition shock decreases over time, such as the level of job satisfaction [35]. Earlier research conducted in the Republic of Croatia on the topic of determining the factors that influence the abandonment of the nursing profession states that job satisfaction, which is known to be significantly influenced by the work environment, work motivation, and individual psychological aspects, strongly reflects the abandonment of the nursing profession [31]. Furthermore, the results show that the respondents differ significantly in the experienced level of transition shock concerning the estimated level of support that they receive at the workplace from colleagues and superiors. Namely, a lower level of support is accompanied by a higher level of transition shock and vice versa. This result is not surprising, since the support of colleagues at the new workplace, and especially the support of superiors, is considered extremely important for a successful transition from the role of a student to the role of a nurse, and provides them with a sense of belonging, connection, and satisfaction [36].

The transition from the educational to the working environment is a stressful period for nurses, and many of them do not have developed stress coping mechanisms. It is precisely the development of mechanisms and strategies for successfully dealing with stress, such as planning, acceptance, and a positive attitude, that could help newly employed nurses to more easily overcome the period of transition, as well as difficulties at work that will arise in the future [37]. Providing adequate support to newly employed nurses through transition programs could, according to available research [38], [39], [40], [41], have a significant effect on reducing the level of transition shock, which can then affect a lower rate of intention to leave the nursing profession.

Although this is the first research on the topic of transition shock in this area and included all new employees in that year, this study has several weaknesses that could have affected the recorded results. Only one hospital was included in the research, which, in addition to this deficiency, caused a relatively small number of respondents to be included in the research. Second, it is possible that newly employed nurses provided desirable answers due to a lack of experience and a need for acceptance. Despite that, this result is of great importance for planning the development of nursing, especially the prevention of occupational stress caused by transition shock and the consequent abandonment of the nursing profession.

Conclusion

The results indicate that newly employed nurses experience transition shock during their 1st year of employment. Although no differences were noted regarding gender, the participants differed regarding some other characteristics. A significant difference in the level of transition shock was recorded concerning the length of waiting for employment, the intention to leave the profession, dealing with stress, job satisfaction, and the level of support from colleagues and superiors. These results can be useful for managers of health institutions to plan specific activities aimed at reducing the level of transition shock, especially at this time of pronounced shortages of nurses worldwide.

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Supplementary Table

Supplementary Table 1: Results of self-assessment and assessment of participants

Variable	Level from 1 to 5				
	1, n (%)	2, n (%)	3, n (%)	4, n (%)	5, n (%)
Dealing with stress	0	2 (4.7)	15 (34.9)	25 (58.1)	1 (2.3)
Self-satisfaction	0	1 (2.3)	6 (14.0)	28 (65.1)	8 (18.6)
Job satisfaction	0	3 (7.0)	6 (13.9)	23 (53.5)	11 (25.6)
The level of support received from colleagues	0	3 (7.0)	13 (30.2)	12 (27.9)	15 (34.9)
The level of support received from superiors/leaders	2 (4.7)	4 (9.3)	11 (25.6)	9 (20.9)	17 (39.5)

Supplementary Table 2: Factor structure and Cronbach alpha

Factor	Question	Cronbach alpha	n	Mean	Minimum	Maximum
Role	1-5, 8	0.79	43	2.04	1.00	3.80
Relationship	10, 11, 18, 22	0.78	43	2.22	1.00	3.75
Expectation	4, 9, 15-18	0.58	43	1.87	1.00	3.00
Private life	13, 14	0.82	43	2.38	1.00	4.00
Performance	19-21	0.78	43	1.94	1.00	3.66
Total transition shock	1-22	0.91	43	2.01	1.00	3.27