Intensive Care Nurses' Perceptions of Their Work Environment, Psychological Distress and the Factors That Affect Them

Yoğun Bakımda Çalışan Hemşirelerde Çalışma Ortamı Algısı, Psikolojik Distres ve Etkileyen Faktörler

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SUMMARY

Objectives: The purpose of this study is to analyze intensive care nurses' perceptions of work environment, psychological distress and the factors that affect them.

Methods: This is a descriptive study. Its sample included 320 nurses working in the adult patient intensive care units of six hospitals (three university and three state hospitals) in the provincial center of Ankara. Data were collected using the Nurse Introductory Information Form, the Work Environment Scale and the General Health Questionnaire-12.

Results: The mean score of nurses who did not personally prefer to work in intensive care unit, did not feel adequate to work in intensive care unit, received inadequate support in the work environment, worked more than 40 hours a week was lower on the Work Environment Scale and higher on the General Health Questionnaire-12. As scores on the Work Environment Scale fall, scores on the General Health Questionnaire rise.

Conclusion: While doing planning regarding intensive care nurses, it is necessary to consider their preference for working in intensive care units, desire to continue, competence, adequate support, and weekly work hours have effects on their work environment satisfaction and risk of mental disorder. The risk of mental problems among nurses can be reduced by increasing their work environment satisfaction.

Keywords: Intensive care units; nursing; psychological distress; work environment perception.

ÖZET

Amaç: Bu araştırmanın amacı yoğun bakımda çalışan hemşirelerde çalışma ortamı algısı, psikolojik distres ve etkileyen faktörlerin incelenmesidir.

Gereç ve Yöntem: Tanımlayıcı bir çalışmadır. Araştırmanın örneklemini Ankara il merkezinde bulunan üç üniversite ve üç devlet hastanesi olmak üzere toplam 6 hastanenin hasta yoğun bakım kliniklerinde çalışan 320 hemşire oluşturmuştur. Veriler Hemşire Bilgi Formu, Çalışma Ortamı Ölçeği (ÇOÖ) ve Genel Sağlık Anketi-12 (GSA-12) ile toplanmıştır.

Bulgular: Yoğun bakımda çalışmayı kendisi seçmeyen, yoğun bakımda çalışmaya devam etmek istemeyen, yoğun bakımda çalışmak için kendini yeterli bulmayan, çalışma ortamında yeterli destek almayan ve haftada 40 saatten fazla çalışan hemşirelerin ÇOÖ puan ortalamaları daha düşük; GSA-12 puan ortalamaları ise daha yüksektir. ÇOÖ puanları düştükçe GSA-12 puanları artmaktadır.

Sonuç: Yoğun bakım hemşireleri ile ilgili planlamalarda; yoğun bakımda çalışma tercihinin, devam etme isteğinin, yeterliliğin, yeterli desteğin ve haftalık çalışma süresinin hemşirelerin çalışma ortamı memnuniyeti ve ruhsal hastalık riskini etkilediği dikkate alınmalıdır. Hemşirelerde çalışma ortamı memnuniyeti arttırılarak ruhsal sorun görülme riski azaltılabilir.

Anahtar sözcükler: Yoğun bakım ünitesi; hemşirelik; psikolojik distres; çalışma ortamı alvısı.

Introduction

Work environment is more than a physical structure. A healthy work environment requires interpersonal relations, adequate communication, proper cooperation, effective decision-making, appropriate personnel and leadership. ^[1,2] In hospitals, intensive care units are highly stressful environments because of continuous emergency expectations,

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complex technology and sudden changes in patients' general health status. Such stressful work environments pose risks to the mental health of health care workers.^[3]

Nurses who have worked with patients for longer are more affected by negative conditions. [4,5] With critical patients, complex equipment, rapid patient circulation, intensive care units are special and isolated parts of hospitals. Nurses there have to provide multi-directional nursing care and use the latest life-saving treatments and technologies. [6-8] Intensive care nurses encounter difficult work conditions, sleeplessness, fatigue, uncertainty about tasks and duties, and provide care to patients who are in pain and sometimes about to die. This work environment also affects nurses' burnout, work satisfaction and desire to continue working. [9,10] These characteristics of their work environment increase stress and their risk for mental disorders. [11]

Compared to other clinical nurses, intensive care nurs-

es experience more psychological problems, their anxiety prevalence is 10.2-32%, and their frequency of depression indicators is 11-31%. These rates vary by personality traits, intra-team relationships, support, responsibility perception, patient deaths, physical well-being, management policies, job definitions and workload, and due to measurement tools used in studies, sampling methods, cultural and demographic differences. [5,12-14] The risk of psychological distress is high for intensive care workers, especially for nurses. Therefore, this study aimed to analyze intensive care nurses' perceptions of their work environment, psychological distress and the factors that affect them. This study attempted to seek answers for the following questions:

- 1. What are intensive care nurses' perceptions of their work environment?
- 2. What are factors that affect intensive care nurses' perceptions of the work environment?
- 3. What is the risk of incidence of mental problem among intensive care nurses?
- 4. What are factors that affect the risk of mental problems among intensive care nurses?
- 5. Is there a relationship between their perceptions of the work environment and the risk of mental problems?

Materials and Method

Study Design

This is a descriptive study.

Population and Sample of the Study

The population of this study included nurses working in the adult patient intensive care units of six hospitals (three university and three state hospitals) in the provincial center of Ankara. There are more nurses in these hospitals than other hospitals. The study sample included nurses who were contacted and agreed to participate. The total number of nurses in the intensive care units of the university hospitals was 395, 315 were contacted, and 172 agreed to participate in this study. The total number of nurses in the intensive care units of the state hospitals was 308, 172 were contacted, and 148 agreed to participate in this study. This study was completed with a total of 320 nurses. Of the nurses in the intensive care units of the university hospitals, 44% participated in this study, while 48% of those from the state hospitals participated. The study data were collected between May and June, 2015 by the researcher in face-to-face interviews.

Data Collection Tools

Study data were collected using the Nurse Introductory Information Form, the Work Environment Scale and the General Health Questionnaire-12.

Nurse Introductory Information Form: The Nurse Introductory Information Form was developed by the researchers using the relevant literature. [4,6,15–17] This form includes 14 questions about age, gender, marital status, educational status, years of professional experience, years of experience in intensive care units, duty in intensive care units, type of employment, weekly work hours, desire to continue working in intensive care units, having adequate support in the work environment, feeling adequate to work in intensive care units, problems experienced in intensive care units and about whether working in intensive care units was their own choice.

Work Environment Scale (WES): This scale was developed by Blegen et al.[13] It has five sub-dimensions: quality management, physical resources, professional relationships, personnel fears and job satisfaction. This is a 5-point Likert type scale with 26 questions. Total scores on the sub-dimensions constitute a total scale score. The minimum possible score on the scale is 26, and the maximum is 130. Higher scale scores indicate higher levels of satisfaction with the work environment. The mean score on the Work Environment Scale was used as a cut-off point. Scores above the mean were considered high or satisfied, and scores below the mean were regarded as low or dissatisfied. In Turkey, the validity and reliability analyses of this scale were performed by Sezgin.^[14] Its Cronbach's alpha coefficient was found to be 0.74, while its reliability coefficients were between 0.62-0.77. However, this study found its Cronbach's alpha coefficient to be 0.80.

General Health Questionnaire-12 (GHQ-12): This scale was developed by Goldberg and Hillier. It is used to find psychiatric problems in community screenings. Higher scores indicate possible mental disorders. This is a 4-point Likert type scale with 12 items. Scores of zero points are given to the first two options, and one point to the last two options. The highest possible score is 12, the lowest is 0. Scores of 4 or more points, 2-3 points, and less than 2 points obtained from the scale were assessed as high, moderate, and low scores. Participants who scored 4 or more on the GHQ-12 were defined as at risk for mental disorders The Turkish validity and reliability analyses of this scale were performed by Kilic. [19] It was seen that sensitivity and specificity of validity and reliability were 0.74 and 0.84, respectively. This study found its Cronbach's alpha coefficient to be 0.85.

Data Assessment

To assess study data, the researchers used SPSS (version 16). This study used the Shapiro-Wilk test as a normality test, and it determined that the data did not have a normal distribution. Therefore, this study used means, medians, percentages (segments of 25 and 75%) and minimum-maximum values for quantitative variables, and frequencies and per-

centages for qualitative variables. The Mann-Whitney U test and the Kruskal-Wallis test, both nonparametric tests, were used in two-group comparisons and in more than two-group comparisons, respectively. This study also used the Dunn test z-statistic to determine groups when there was a difference between groups. This study used Spearman's correlation test to determine correlations between variables. The significance threshold for all statistical analyses was p<0.05.

Table 1. The nurses' personal and professional characteristics (n=320)

Characteristics	n	%
Age		
20—25	85	26
26-30	137	42
31–35	52	16
36-40	46	14
Gender		
Male	37	11
Female	283	88
Marital status		
Married/married, but living separately	141	44
Single/divorced	179	55
Education		
Medical vocational high school	39	12
Associate's degree	25	7.
Bachelor's degree / Postgraduate	256	80
Years of professional experience		
≤3	109	34
4–6	96	30
7–9	37	11
≥10	78	24
Years of intensive care unit experience		
≤1	84	26
2–4	125	39
5–7	52	16
≥8	59	18
Duty in intensive care unit		
Head nurse	26	8.
Clinical nurse	294	91
Type of employment		
Continuous-day	63	19
Continuous-night	28	8.
Shift work	229	71
Weekly work hours		
<40	93	29
Between 40-48	172	53
≥48	55	17
Having willingly chosen to work in		
intensive care unit		
Yes	163	50
No	157	49
Desiring to continue working in		
intensive care unit		
Yes	204	63
No	116	36
Feeling adequate to work in		
intensive care unit		
Yes	248	77
No	72	22
Having adequate support in the		
work environment		
Yes	86	26
No	234	73

Ethical Dimension

Before initiating this study, the researchers obtained written permission (77082166-604.01.02-39525) from the Ethics Committee of the universities and institutions. The nurses were clearly informed in detail about the study, and their written informed consent was obtained.

Results

Of the nurses, 42.8% were in the age group of 26-30 years, 88.4 were female, 55.9% were single or divorced, and 80% had bachelor's degrees or postgraduate education. Of them; 38.8% had been working in the current intensive care unit for 2-4 years, 39.1% had been working in intensive care units for 2-4 years, and 66.9% had been working as a nurse for more than 3 years. A large majority (91.9%) of the nurses were clinical nurses, 71.6% worked in shifts, and 53.8% worked 40-48 hours a week. Nearly half of the participating nurses (50.9%) chose to work in intensive care units, 63.8% desired to continue working in intensive care units, and 77.5% felt adequate to work in intensive care units (Table 1).

The problems that the nurses experienced in intensive care units included: crowding/physical conditions (71.6%), problems with materials/personnel (67.8%), risk situations [(medications, infections, etc.), 65.3%], critical patient care (55.9%), problems with patient relatives (49.4%), type of employment (46.3%), problems with job definition (38.1%), frequently encountering death (35.3%), relationships with administrators (32.2%), problems with treatment staff (21%) and other problems (Table 2).

The mean score of nurses on the WES was 89.0 (Q1==82.25-Q3=98.00), and 49.1% had more points than 89 on the WES (Table 3, Table 4). This study did not find a statistically significant difference between the WES mean scores according to the nurses' years of experience in intensive care units and type of employment (p>.05) The WES mean score of the nurses who had worked as a nurse for 3 years or

Table 2. The nurses' problems in intensive care units (n=320)

Problems	n	%
Crowding/physical conditions	229	71.6
Problems with materials/personnel	217	67.8
Risk conditions (medications, infections, etc.)	209	65.3
Critical patient care	179	55.9
Problems with patient relatives	158	49.4
Type of employment	148	46.3
Problems with job definitionr	122	38.1
Frequently encountering death	145	35.3
Relationships with managers	103	32.2
Problems with treatment staff	68	21.3
Other (autonomy, respect, reputation,		
overwork, mobbing)	11	3.4

Table 3. The Nurses' Mean Scores on the WES and GHQ-12 (n=320)

Scales	Median (Q1-Q3)*	Mean±SD	Min.	Max.
WES	89.0 (82.25–98.00)	90.45±11.45	51.00	128.00
GHQ-12	2 (0–2)	2.77±3.07	0.00	12.00

^{*:} Since the data did not have a normal distribution, medians, Q1 (segment of 25%) and Q3 (segment of 75%) are shown as descriptive statistics. SD: Standard deviation; Min.: Minimum; Max.: Maximum.

Table 4. The Distribution of the Nurses by Their Scores on the WES and GHQ-12 (n=320)

Scales	n	%
WES		
≤89 (Dissatisfied)	163	50.9
>89 (Satisfied)	157	49.1
GHQ-12		
<4 (No risk for mental disorders)	206	64.3
≥4 (Risk for mental disorders)	114	35.7

WES: Work Environment Scale; GHQ-12: General Health Questionnaire-12.

less was lower than that of the nurses who had worked as a nurse for 10 years or more (z=-3.130; p=0.011). The WES mean scores of the nurses who were clinical nurses, who did not choose willingly to work in intensive care units, who did not want to continue working in intensive care units, felt inadequate working in intensive care, received inadequate support in the work environment were lower than the others' scores (p<0.05). The nurses who worked 40-48 hours a week had lower mean scores on the WES than those who worked fewer hours (z=0.001; p=0.004) (Table 5). There was a negative weak relationship (r=-0.146; p<.001) between nurses' weekly work hours and WES scores, and a positive weak relationship (r=.118; p<.05) between years of professional experience and WES scores.

The nurses' mean score on the GHQ-12 was 2.77±3.07, and 35.7% scored more points than 4 on the SHQ-12 (Table 3, Table 4). This study did not find a statistically significant difference between the GHQ-12 mean scores according to nurses' years of professional experience, years of experience in intensive care unit and type of employment

Sociodemographic and professional characteristics	n	%	WES		GHQ-12	
			Median (Q1-Q3)	test	Median (Q1-Q3)	test
Years of experience in intensive care unit						
· ≤1	84	26.3	89.0 (82.00-97.75)	$\chi^2 = 7.007$	1.0 (0-4.0)	$\chi^2 = 2.235$
2–4	125	39.1	88.0 (82.00-96.00)	p=0.072	2.0 (0-5.0)	p=0.525
5–7	52	16.3	90.0 (83.25-102.00)	·	2.0 (0-6.0)	·
≥8	59	18.4	93.0 (85.00-99.00)		2.0 (1.0-5.0)	
Years of professional experience						
≤3	109	34.0	87.0° (81.50-94.50)	Z=10.050	2.0(0-5.0)	Z=4.916
4–6	96	30.0	89.0 (83.00-98.75)	p=0.018*	1.0 (0-5.0)	p=0.178
7–9	37	11.6	87.0 (81.50–97.00)	·	2.0 (0.5-5.0)	·
≥10	78	24.4	93.0ª (85.00-101.00)		2.0 (0-5.0)	
Duty in intensive care unit			· · · · · · · · · · · · · · · · · · ·		, ,	
Head nurse	26	8.1	93.0 (82.00-102.50)	Z=-2.234	0.5(0-1.0)	Z=2.391
Clinical nurse	294	91.9	89.0 (82.00-97.00)	p=0.026*	2.0 (1.0-5.0)	p=0.017
Type of employment			` '	•	, ,	•
Continuous-day	63	19.6	92.0 (83.00-99.00)	$\chi^2 = 2.199$	1.0 (0-3.0)	$\chi^2 = 2.369$
Continuous-night	28	8.8	87.0 (80.00-99.00)	p=0.333	1.5 (0-3.0)	p=0.306
Shift work	229	71.6	89.0 (82.00-97.00)		2.0 (0-5.0)	
Weekly work hours			` '		, ,	
≤40	93	29.0	93.0a (86.00-100.50)	$\gamma^2 = 10.575$	1.0a,b (0-3.0)	$\chi^2 = 12.45$
40-48	172	53.8	87.5° (82.00-95.75)	p=0.005*	2.0a (0-5.0)	p=0.002
≥48	55	17.2	87.0 (81.00-99.00)		4.0 ^b (0-6.0)	
Having willingly chosen to work in intensive care unit					(5 272)	
Yes	163	50.9	91.0 (83.00-99.00)	Z=-2.321	1.0 (0-4.0)	Z=2.851
No	157	49.1	87.0 (81.00-96.00)	p=0.020*	3.0 (0-5.0)	p=0.004
Desiring to continue working in intensive care unit			,		(1 111)	
Yes	204	63.7	92.0 (85.00-99.00)	Z=-4.192	1.0 (0-4.0)	Z=3.378
No	116	36.3	86.0 (80.00-93.75)	p=0.000*	3.0 (0-6.0)	p=0.001
Feeling adequate to work in intensive care unit			()	p	()	F 2.20.
Yes	248	77.5	91.0 (83.25-99.00)	Z=-3.116	1.0 (0-5.0)	Z=2.534
No	72	22.5	85.5 (81.00–93.00)	p=0.002*	3.0 (0-6.0)	p=0.011
Having adequate support in the work environment			(2)	F	()	F
Yes	86	26.9	94.5 (87.00-102.00)	Z=-4.165	1.0 (0-3.0)	Z=3.538
No	234	73.1	87.0 (82.00–96.00)	p=0.000*	2.0 (0-5.0)	p=0.000

 $[\]chi^2$: Kruskal-Wallis test; Z: Mann-Whitney U Test; a,b: Dunn test z-statistic; *: p<0.05. WES: Work Environment Scale; GHQ-12: General Health Questionnaire-12.

Table 6. The Relationship between the WES and the GHQ-

Scales	GHQ	GHQ-12		ES
	r*	p	r*	р
WES	-0.342	0.000	_	_
GHQ-12	_	_	-0.342	0.000

*: Spearman's correlation test. WES: Work Environment Scale; GHQ-12: General Health Questionnaire-12.

(p>.05) The GHQ-12 mean scores of the nurses who were clinical nurses, who did not choose willingly to work in intensive care units, who wanted to continue working in intensive care units, who felt adequate to work in intensive care units and who received adequate support in the work environment were higher than the others' scores (p<05). The nurses who worked 40 hours or less a week had higher mean scores on the GHQ-12 than those who worked 40-48 hours a week (z=0.00; p=.010) and 48 or more hours a week (z=0.00; p=.005) (Table 5). A positive weak relationship was found between nurses' weekly work hours and scores on the GHQ-12 (r=.193; p<.001). This study also found a statistically significant, negative, but weak relationship between the nurses' scores on the GHQ-12 and on the WES (r=.342; p<.001) (Table 6).

Discussion

There are severe stress factors in intensive care units because of the characteristics of this environment. Continuously encountering stressors in the work environment for long periods can cause workers to experience mental disorders. Especially intensive care nurses who have close relationships with patients are emotionally and physically at risk. Reducing the risks in the work environment and relieving distress from mental disorders is necessary for nurses to provide adequate care. [4,6,10] This study examined intensive care nurses' perceptions of work environment, psychological distress and relevant factors.

According to the nurses' mean score on the GHQ-12 (2.77±3.07), their risk for mental disorders was moderate. Of them, 35.7% were at risk for mental disorders. Another study of health care workers determined that the mean score of nurses on the GHQ-12 was 3.65±3.22.^[20] Mean scores similar to those of this study show that nurses had a moderate risk level for mental disorders. Another study conducted with oncology nurses found that 30% of nurses had GHQ-12 mean scores that indicated a moderate risk level for mental disorders.^[21] Another study of nurses found the mean score of participants on GHQ-12 to be 5.79±0.91, indicating high levels of risk for mental disorders.^[22] A different study found that nurses' mean score on the GHQ-12 was 5.42±3.29.^[23]

In the present study, the fact that there was a moderate level risk of having mental disorders and the rate of nurses who were at risk for mental disorders was low can be explained by the rates of nurses who were satisfied with the work environment and who were not were very close to each other. Studies have shown that distressed relationships and various dangers in the work environment affect psychological health^[6,24] and have emphasized that satisfaction is important in a healthy work environment.^[25] Similarly, the present study determined that as satisfaction with the work environment falls, the risk of mental disorders rises.

It was found that as nurses with more experience in the nursing profession have more positive perceptions of and satisfaction with the work environment increase. Another study determined that more professional experience has positive effects on perceptions of the work environment. [4] Like years of professional experience, nurses' problem-solving skills and professionalism may affect their positive perceptions of the work environment. [26-28] The present study found that as nurses worked longer hours a week, their perception of the work environment worsened. Work satisfaction is a part of perception of the work environment. It is to be expected that lower levels of job satisfaction negatively affect perceptions of the work environment. Some studies assessing nurses' job satisfaction have found that longer weekly work hours reduce job satisfaction.^[28,29] Another study determined that working overtime reduces the quality of professional life. [15] Similarly, the present study concluded that working overtime (weekly) negatively affects nurses' job satisfaction, quality of life and their perception of the work environment.

The present study found that nurses who were working as clinical nurses did not choose to work in intensive care units, did not want to continue working in intensive care units, did not feel adequate working in intensive care, did not receive adequate support in the work environment perceived the work environment as more negative. Clinical nurses take direct responsibility for patient care. Therefore, workload in the clinic and working conditions affect clinical nurses more than head nurses. The participating nurses reported that they experienced problems with crowding/physical conditions, material and personnel, risky situations, critical patient care, patient relatives, type of employment, job definition, frequently encountering death, relationships with administrators and treatment staff. While facing these problems, the nurses did not receive adequate support. This situation may trigger feelings of inadequacy and the desire not to continue working in intensive care. Stress caused by this vicious cycle can increase nurses' negative perceptions of the work environment.^[7] However, in the work environment, positive professional relationships and receiving adequate support are known as supporting factors, [30] while intra-team communication conflicts and weak relationships are known as negative factors. [4,25,31] Nurses who work in a clinic that they did not choose and who feel inadequate may have negative effects on their professional relationships and job satisfaction, thus on their perceptions of the work environment. Similarly, other studies have determined that feeling well-suited to the occupation and desiring to continue working increase job satisfaction, [32] and that nurses who desire to continue working had higher levels of satisfaction with the work environment and job satisfaction. [14]

The present study found a higher risk of mental disorders for nurses who were working as clinical nurses more than 40 hours a week, were not working willingly in intensive care units, did not want to continue working in intensive care unit, felt inadequate and did not receive adequate support in the work environment. These characteristics also negatively affected perceptions of the work environment. The finding that perceptions of the work environment are associated with the risk of mental problems implies that these characteristics reduce satisfaction with the work environment and increase the risk of mental disorders.

As the participating nurses reported, longer work hours may exacerbate the physiological burden of working in a risky and busy environment where nurses frequently encounter deaths and problems with personnel and the environment. Longer work hours may negatively affect mental health by depriving nurses of rest, by reducing time for social activities, and motivation and job satisfaction. Similarly, other studies have reported that as nurses' work hours increase, the risk of mental problem increases, too. [22,24]

In the present study, the reason clinical nurses had higher levels of risk of mental problems may be because they provide care to patients and encounter problems and death in the work environment more than nurse managers do. Moreover, if clinical nurses do not receive adequate support in the work environment, it will be difficult for them to cope with problems, and the risk of mental problems may increase. Similar studies have also determined that conflicts with other workers in the work environment are an important stressor^[16] that negatively affects nurses' mood; ^[17,24] however, support from colleagues makes coping with problems easier. ^[33]

The present study determined that years of experience in this profession and the type of employment in the intensive care unit had no effect on the risk for mental disorders. However, some studies have shown that years of experience affect mood, [6,24] and especially shift work has negative effects on nurses' mental health. [22,24] In the present study, most of the participants were young and desired to continue working in intensive care unit. This may be why their mental health was not affected by work hours and type of employment.

Results and Recommendations

Half of the participating nurses were not satisfied with their work environment. Therefore, it is required to take measures to reduce the severity and frequency of problems that nurses experience about crowding/physical conditions, material and personnel, risky situations, critical patient care, patient relatives, type of employment, job definition, frequently encountering death, relationships with managers and treatment staff. Fewer years of experience in the profession reduced the nurses' satisfaction with the work environment satisfaction. Nurses with more experience in intensive care units had fewer problems. The satisfaction with the work environment of nurses who were working as clinical nurses, who did not personally choose to work in intensive care unit, who did not want to continue working in intensive care unit, who did not feel adequate working in their current intensive care unit, who did not receive adequate support in the work environment, and who worked more than 40 hours a week was lower. The same groups' risk of mental disorders was higher. As satisfaction with the work environment falls, the risk of mental disorder rises. Therefore, clinical nurses who desire to work and were educated in this field should be employed in intensive care units. Adequate support should be given to them, and they should not work more than 40 hours a week. These measures will have positive effects both on perceptions of the work environment and mental health. Given that nurses' negative perceptions the work environment increase the risk of experiencing psychological distress, enhancing satisfaction with the work environment may contribute to reducing the risk of psychological distress. It should be taken into consideration by hospital administrators and consultation liaison psychiatry (CLP) teams that clinical nurses are more at risk than head nurses in terms of dissatisfaction with the work environment and mental disorders.

Study Limitations

While selecting hospitals to conduct the present study, the researchers selected hospitals where the numbers of intensive care units and nurses were high that were located in the provincial center of Ankara. However, the fact that the participation rate of the nurses in these hospitals was low is a limitation of the present study.

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