Comparison of the quality of life, psychological well-being, and emotional self-regulation among nurse with non-nurse women in Imam Khomeini hospital, Kuhdasht City, Iran

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Original Article

Abstract

BACKGROUND: In the hospital, nurses are exposed to high levels of psychological stress. The purpose of this study was to compare the quality of life, psychological well-being, and emotional self-regulation of nurse and non-nurse women in Imam Khomeini hospital in Kuhdasht City, Iran.

METHODS: This was a descriptive prospective causal-comparative research. The statistical population of this study was all the women staff of Imam Khomeini hospital in Kuhdasht in 2018. A sample population of 100 nurse women was selected using convenience sampling method, and 100 non-nurse women were selected via random sampling method. The instruments used in this research were 36-Item Short Form Health Survey (SF-36) Quality of Life, Reef Psychological Well-Being, and MARS emotional self-regulation questionnaires. Data were analyzed using multivariate analysis of variance (MANOVA) (P < 0.050).

RESULTS: The MANOVA test showed a significant difference between quality of life, psychological well-being, and emotional self-control between nurse and non-nurse women (P < 0.050). This meant that nurse women in the studied variables were lower than their non-nurse counterparts.

CONCLUSION: According to the results of this research, it is suggested that in nursing mental health promotion programs, education should be considered in order to improve the quality of life, psychological well-being, and emotional self-regulation of nurses.

KEYWORDS: Quality of Life, Psychological Well-Being, Emotional Self-Regulation, Nurses

Introduction

Among the levels of stress in the hospital, members of the medical team, especially the nurses, are those who are exposed to high levels of psychological stress.[1] Hegney et al. believe that among all the healthcare professions, nurses are more exposed to burnout, fatigue, and loss of satisfaction and quality of life due to physical and mental stresses caused by care of patients.[2]

Quality of life is a complex and multidimensional concept of physical, mental, cultural, and social aspects.[3] Quality of life is related to the health and satisfaction of individual in all aspects of life.[4] It is described as the product of the interaction between the personality of individuals and continuity of events in life.[5] Various factors affect the quality of life such as age, culture, gender, education, class status, disease, and social environment, and also general behavioral, occupational, and adaptive resources.[6-8] Job stress and job burnout have a significant negative impact on

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the quality of life.[9]

One of the important indicators in quality of life is psychological well-being, which is related to individual's assessment of his/her life. Psychological well-being is defined as people's perception of life in the domain of emotional behaviors, mental functions, and mental health dimensions.[10,11] Psychological well-being is a multi-component concept that includes self-acceptance, positive relationships with others, autonomy, domination of the environment, purposeful life, and individual development.[12] In the meantime, nursing job characteristics are such that they can affect the psychological well-being of nurses; so that inappropriate job conditions can predict and explain their emotional distress, and decrease their psychological well-being.[13]

In this case, Kavosi et al. reported the psychological well-being of nurses at the lower level in hospital specialty departments.[14] Turner and McCarthy concluded that most psychiatric nurses had a lower level of happiness, optimism, lower hopes, and overall psychological well-being than others.[15] Smith and Yang showed that resilience and psychological well-being of nurses in China was lower than other hospital staff.[16] In other study, Zadhasan et al. found that happiness and psychological well-being in nurses were predictive of job satisfaction.[17] However, emotional self-regulation is one of the most important psychological skills that may affect various aspects of individual life, interpersonal interactions, and mental and physical health of nurses.[18-21]

Considering the central role of nursing profession in improving quality of patient cares and, consequently, the lack of research that compared the variables in nurse and non-nurse women, this study compared the quality of life, psychological well-being, and self-regulation of nurse and non-nurse women.

Materials and Methods

This was a descriptive prospective causal-comparative research. The statistical population was all nurse and non-nurse women staff of Imam Khomeini hospital in Kuhdasht City, Lorestan Province, Iran, in 2018. A sample population of 100 nurse women was selected using convenience sampling method, and 100 non-nurse women were selected via random sampling method.

36-Item Short Form Health Survey (SF-36) Quality of Life questionnaire was used to collect the data. The questionnaire consists of 36 questions with multi-choice responses, and measures one's view of his health. The SF-36 scale has eight dimensions of physical function, physical role, physical pain, general health, vitality, social function, emotional role, and mental health. The alpha coefficients for these dimensions in Persian version of questionnaire were 0.90, 0.85, 0.71, 0.65, 0.77, 0.84, 0.77, and 0.72, respectively, in this study, indicating a good internal consistency. The alpha coefficient in this study was equal to 0.78.

Another tool used in this research was Reef Psychological Well-Being Inventory. This scale was designed by Reef in the 1980. The original form had 120 questions, but in later studies, shorter forms had 84, 54, and 18 questions, respectively. In this research, 84-question forms of it was used. The psychological well-being scale has six subscales of acceptance, environmental domination, autonomy, positive relationships with others, purposefulness, and personal growth. Mikaeili Mani and Madadi Emamzadeh translated it to Persian with a total reliability coefficient of 0.83, as well as 0.71 for acceptance, 0.77 for positive relationships with others, 0.78 for autonomy, 0.77 for environmental domination, 0.70 for purposefulness, and 0.78 for personal growth subscale.[22] In the present study, the total reliability coefficient was 0.78.

The MARS Emotional Self-Regulation questionnaire was another used tool. This questionnaire contains 44 questions that include cognitive change, behavioral change,

emotional change, negative mood decrease, and positive mood increase subcomponents. The reliability of Persian version of this questionnaire was 0.75 using half-way, and 0.80 using Cronbach's alpha. Moreover, the validity of each of the subcomponents was from 0.63 to 0.70, which indicated the high validity of this scale in Iranian culture.[23] In this study, the Cronbach's alpha coefficient was 0.73.

At the end, after collecting the completed questionnaires, one-way analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA) was used to analyze the data at the significant level of P < 0.050.

Results

Among the nurse women, 80 were undergraduate with age range of 25-40 years and 20 had associate degree with age range of 30-48 years.

The subscales of quality of life, psychological well-being, and the emotional adjustment in non-nurse and nurse group can be seen in table 1.

In applying parametric statistical methods, the assumptions of the test were first approved; so that the desired test could be used; therefore, the assumptions of the MANOVA test, such as independence of observations, normal distribution of variables, and homogeneity of variances in the two groups, were examined and confirmed.

With MANOVA, there was a significant difference between at least one of the components of quality of life, psychological well-being, and emotional self-regulation of nurse and non-nurse women in Imam Khomeini hospital in Kohdasht city (Table 2).

The results showed a significant difference in the components of general health, vitality, social function, emotional role, mental health, acceptance, autonomy, purposefulness, emotional change, negative mood decrease, and positive mood increase between nurse and non-nurse women (Table 3).

Table 1. The scores of subscales of quality of life, psychological well-being, and the emotional adjustment in study groups

Variable	Nurse	Non-nurse
Physical function	8.20 ± 1.74	8.25 ± 1.29
Physical role	8.01 ± 1.94	8.80 ± 1.36
Physical pain	7.80 ± 1.56	7.80 ± 2.04
General health	7.80 ± 1.56	9.60 ± 2.04
Vitality	7.10 ± 2.67	9.60 ± 2.80
Social performance	8.01 ± 1.98	11.80 ± 2.04
Emotional Role	7.60 ± 2.56	9.35 ± 2.33
Mental health	8.70 ± 1.87	10.50 ± 3.04
Acceptance	29.60 ± 1.77	37.80 ± 2.08
Environmental domination	30.40 ± 1.19	33.60 ± 1.16
Self-governing	28.35 ± 1.04	33.03 ± 1.31
Positive relationships	33.40 ± 1.31	34.30 ± 1.30
Purposefulness	32.30 ± 1.03	41.60 ± 2.89
Personal growth	21.90 ± 1.45	31.85 ± 1.60
Cognitive change	21.62 ± 1.97	23.60 ± 1.88
Behavioral change	20.90 ± 1.94	22.60 ± 1.23
Changing the location	23.25 ± 1.72	26.05 ± 1.67
Emotional change	24.00 ± 1.84	23.64 ± 1.83
Negative mood decrease	26.25 ± 1.72	24.05 ± 1.67
Positive mood increase	21.00 ± 1.90	28.64 ± 1.86

The amounts are as mean ± standard deviation (SD).

Table 2. The results of MANOVA test in this study

Test	Value	F-statistic	Hypothesis degree of freedom	Error degree of freedom	P
Pillai's trace	0.63	30.83	20	177	0.001
Wilk's lambda	0.36	30.83	20	177	0.001
Wilk's lambda	1.76	30.83	20	177	0.001
Roy's largest root	1.76	30.83	20	177	0.001

MANOVA: Multivariate analysis of variance

The achieved significant level was smaller for general health, vitality, social function, emotional role, mental health, acceptance, autonomy, purposefulness, emotional change, decrease in negative mood, and positive mood increase compared with the significance level of 0.0025 obtained from Benfrowny correction (the division of the significant level of 0.05 into 20 dependent variables). In addition, the high power of the statistical test in the present study suggested that with a high probability, the null hypothesis was correctly rejected.

Discussion

The results of the analysis of the first hypothesis of the study showed that nurse women had lower levels of physical function and physical pain compared to non-nurse counterparts in all components of quality of life (physical function and physical pain). This finding is consistent with the results of different researches.[7-10]

The results of the analysis of the second hypothesis of the research also showed that psychological well-being in nurse women was lower than their non-nurse counterparts (environmental mastery, positive relationships with others, and personal growth). This finding is similar with the results of different researches.[13-16]

Table 3. The results of one-way analysis of variance (ANOVA) test for multivariate analysis of variance (MANOVA)

Statistical index	Variable change source	Within-group variation (SS)	Degree of freedom	F-statistic	P	Effect size	Test power size
Physical function	Group	2.51	1	0.71	0.410	0.02	0.13
Physical role	Group	7.68	1	1.39	0.240	0.04	0.21
Physical pain	Group	38.64	1	8.06	0.006	0.25	0.86
General health	Group	40.51	1	9.90	0.001	0.27	0.88
Vitality	Group	659.07	1	46.72	0.001	0.56	0.99
Social performance	Group	70.28	1	31.36	0.001	0.46	0.99
Emotional role	Group	159.56	1	37.73	0.001	0.54	0.99
Mental health	Group	99.49	1	39.21	0.001	0.56	0.99
Acceptance	Group	55.68	1	13.01	0.001	0.31	0.95
Dominate on environment	Group	10.35	1	1.58	0.003	0.26	0.96
Self-governing	Group	16.09	1	20.02	0.001	0.41	0.96
Positive relationships	Group	1.01	1	1.03	0.310	0.03	0.16
Purposefulness	Group	40.45	1	19.60	0.001	0.32	0.99
Personal growth	Group	18.57	1	8.98	0.004	0.24	0.94
Cognitive change	Group	0.08	1	0.22	0.630	0.01	0.07
Behavioral change	Group	0.08	1	0.17	0.680	0.01	0.08
Changing the location	Group	0.02	1	0.04	0.840	0.01	0.05
Emotional change	Group	18.62	1	17.49	0.001	0.37	0.98
Negative mood decrease	Group	38.48	1	18.37	0.001	0.31	0.99
Positive mood increase	Group	96.09	1	22.03	0.001	0.42	0.99

In explaining these research findings, it can be said that the nursing profession consists of a series of activities and interpersonal relationships that are often stressful. There are a lot of stressors such as contrasting with colleagues, working in an environment where managers do not support employees, frequent and direct clashes with death, suffering, and injuries. Therefore, the combination of these stressors in the healthcare environment causes nurses to be affected in their psychological and physical dimensions, which results in lowering the desired quality of life. Moreover, in the second explanation of the research, it can be said that occupations in which interpersonal communication and social relations are widespread, and whose employees play the role of care and medical care, naturally, provide the basis for the formation of some problems and discomforts. The total of these conditions reduces psychological variables, including psychological well-being.[24]

The results of the analysis of the third hypothesis of the research showed a significant difference between emotional self-regulation between the nurse and non-nurse women groups, meaning that emotional self-regulation in nurse women was more than non-nurse women on a scale and a lower level. In the field of emotional self-regulation of nurses, research has not been done so far, and each research has done some kind of emotional self-regulation in groups with psychological trauma. The results of the final hypothesis of this research can be compared with the findings of different studies.[19-21,23]

High emotion and emotional capacity allows the person to use the positive mood and the level of tolerance in dealing with others. So that, they can handle the best of their reaction and behavior, and achieve the desired emotion and emotional compatibility that this adjustment will make the other dimensions of adaptability smoother. On the other hand, in stressful situations, people are in difficulty with their knowledge, and they are not able to adjust their emotions; therefore, since nursing jobs are full of stressors, this factor regulates their emotions.[25]

However, the present study was not without limitations that the existence of these limitations requires more caution. This research was conducted only with nurses at Imam Khomeini hospital in Kuhdasht City. This research was conducted only in the field of nurse women. In the implementation of research, a number of subjects were discontinued because of job engagement. In the context of the variable of emotional self-regulation in the personnel of the hospital, the research background was not found. In this research, the only used tool was questionnaire.

Conclusion

In general, in this study, quality of life, psychological well-being, and emotional self-regulation status of nurses was not good. This will result poor service to patients and clients by nurses. Hence, by formulating policies and implementing programs, policy makers can improve quality of life, psychological well-being, and emotional self-regulation of nurses. Their job satisfaction can be increased, which results in providing nanny-friendly services to patients.

Conflict of Interests

Authors have no conflict of interests.

Acknowledgments

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