The Nurses' Quality of Life Based on Burnout, Perceived Social Support and Psychological Hardiness

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Background: Nurses are responsible for maintaining and improving the health and quality of life of patients. Therefore, it is important to assess the quality of life of nurses in order to improve it. Quality of life is affected by many variables and among them burnout, perceived social support and psychological hardiness are the leading ones. This study aimed at predicting the quality of life of nurses based on job burnout, perceived social support and psychological hardiness.

Methods: This cross-sectional study was carried out on nurses working in governmental hospitals in Tehran , 2015. Four-hundred nurses were selected by multistage cluster sampling. The instruments were burnout, perceived social support, psychological hardiness and quality of life questionnaires. The data was analyzed using Pearson correlation and multiple regression model simultaneously.

Results: The results showed that the burnout and quality of life of the nurses had a significant and negative relationship (r=-0.39) and the perceived social support (r =0.61) and psychological hardiness (r =0.45) had a positive and significant correlation with quality of life of nurses (P<0.01). In a predictive model of burnout, perceived social support and psychological hardiness could predict 59.3 percent of the changes in quality of life (R2=0.593).

Conclusion: According to the results, it is suggested that nursing executives, counselors, therapists and policy makers pay attention to the signs and the effects of these variables , and conduct some appropriate programs for improving the quality of life of nurses.

Keywords: Burnout, Perceived Social Support and Psychological Hhardiness, Quality of Life, Nurses

Introduction

Nursing is a stressful job and several factors such as high pressure of work , rotating shifts, patient care and an inadequate proportionate ratio of nurses and patients can cause more stress (1). An antithetic tendency is an outcome of stress in health pathway that reduces organizational efficiency and increases employee relocation and also has significant disadvantages on health and quality of life (2). Quality of life is a comprehensive and individual concept that are affected by physical health, personal growth, psychological states and social relationships (3). Quality of life as a multidimensional and complex structure is the understanding of culture, values and a situation that people live in (4).

Many psychological factors have association with quality of life and burnout is one of them. Burnout gives rise to delays and absenteeism, job dissatisfaction, workplace nagging and etc. (5). Stress is an inseparable part of occupations that agitate the mind and gradually leads to burnout (2). burnout means physical, emotional and mental fatigue that is caused by long-term collision with intolerable job (6). Burnout is a psychological syndrome that the people feel under pressure, results in negative impressions about the patient and ends up to a decrease of competence at work (7) and its main sign is negative self-assessment (8). Research showed that burnout had negative and significant relationship with quality of life (8-12). The results of Sosin et al (2014) study showed a significant and inverse relationship between burnout and quality of life (9). The research of Sepahmansour and colleagues (2012) indicated a negative and meaningful correlation between quality of life variables and job satisfaction and burnout (11). The perceived social support, which means the acceptable support from individuals and groups, is another factor that related with quality of life and facilitate the stress tolerance (13). Social support looks at individual support of their relations with others from the perspective of cognitive assessment. The social support theorists believe that the only relationship that a person knows it as a suitable and available source for meeting their needs is considered as support (14). Sometimes, the aid is inappropriate and untimely. Not only the support, but also the perception of support is

important (15). Social support is defined as an enjoyment of affection, companionship and family members' attention, friends and others (16). The results showed a positive and significant relationship between social support and quality of life (20-17). The results of Wu and colleagues (2015) showed that social support had a direct and notable correlation with quality of life (17). The Jalilian and colleagues (2013) reported a positive and significant relationship between perceived social support and quality of life (20).

Psychological hardiness is another factor related to quality of life. Hardiness is a characteristic component that acts as a resistance source in confronting with stressful events (21).

Tenacious people have high control power and consider the challenges as an opportunity to growth (22). Tenacious people know the importance, meaning and values of who they are and what they do. Furthermore, they confirmed their role over that of others in solving problems and consider the change as a normal aspect of life (23). In stressful situations, hardiness is effective in maintaining the health and quality of life. Tenacious people know the determining factor in creating change (24). Research showed that psychological hardiness had positive and significant correlation with quality of life (25-27). The research of Gharehzad Azari et al (2013) showed that hardiness and quality of life have significant and direct correlation (25). Also the results of Aghayousefi and Shahande study (2012) showed a positive and remarkable relationship between hardiness and quality of life (27).

The previous studies assessed the relationship between burnout, social support and psychological hardiness and quality of life, but one of the main shortcomings of these studies was lack of attention to simultaneous role of these variables in predicting the quality of life. Being simultaneously in a predictive model, which one these variables will present better understanding of quality of life? The predictor variables of this study can predict a part of quality of life in order to design and implement some in-service programs to increase quality of life of nurses. Regarding to importance of quality of life of nurses, responsible for maintaining and improving the health and quality of life of patients, the aim

of this study was the prediction of quality of life of nurses according to burnout, perceived social support and psychological hardiness.

Methods

This research was a cross-sectional study conducted on the nurses working in governmental hospitals in Tehran, 2015. First , three regions were selected from five northern, southern, eastern, western and central regions of Tehran and then six hospitals randomly were selected among the hospitals in each region, and approximately 22 persons were chosen from each hospitals. The inclusion criteria were lack of experiencing stressful events like divorce and death of loved ones and morning shift nurses in the past six months. The exclusion criteria included the use of psychiatric drugs, and access to incomplete questionnaire that we were not confront to such this questionnaire. Apart from demographic data (age, sex, marital status and education) following questionnaires were used to collect data.

Job burnout questionnaire: This questionnaire was designed by Maslach & Jackson (2008). It has 22 items based on seven-point Likert scale and is scored from zero to six. Its score is obtained by averaging the score of items and whatever the score is higher, job burnout is greater. The reliability of questionnaire was reported 0.87 with Cronbach's alpha method (7). Also Ahghar (2007) reported its reliability 0.88 by test-retest method (29). The reliability was calculated using Cronbach's alpha 0.83 in this study.

Perceived Social Support Questionnaire: This questionnaire was designed by Zimet et al (1988), which has 12 items, that is scored from one to seven using seven-point Likert scale. Its score is obtained by averaging the score of items and whatever the score is higher, social support is greater. The reliability of questionnaire was reported 0.92 with Cronbach's alpha method (30). Also Sori and Ashori (2015) reported its reliability 0.85 by Cronbach's alpha method (31). The reliability was calculated using Cronbach's alpha 0.88 in this study.

Psychological hardiness questionnaire: This questionnaire was designed by Kobasat (1976), which has 50 items, that is scored from one to four using four-point Likert scale. Its score is obtained by averaging the score of items and

whatever the score is higher, psychological hardiness is greater. The reliability of questionnaire was reported 0.78 with Cronbach's alpha method (32). Also Sori and Ashori (2015) reported its reliability 0.83 by Cronbach's alpha method (31). The reliability was calculated using Cronbach's alpha 0.76 in this study.

Quality of life questionnaire: This questionnaire was designed by World Health Organization (2004). This is a 26-item tool that is scored from one to five using five-point Likert scale. Its score is obtained by averaging the score of items and whatever the score is higher, quality of life is greater. The reliability of questionnaire was reported more than 0.70 with Cronbach's alpha method in different countries (32). Pour Afkari et al (2014) reported its reliability 0.84 by Cronbach's alpha method (33). The reliability was calculated using Cronbach's alpha 0.79 in this study.

To analyze the data, central tendency and dispersion indices in descriptive level and Pearson correlation coefficient and simultaneous multiple regression model in inferential level were reported by SPSS-19 at 0.01. After the privacy and confidentiality of personal information, the written consent was taken.

Results

The participants were 400 nurses with an average age of 36.81 ± 4.95, 127 men and 273 women. Among them, 347 were married and 53 unmarried. Educational level: 47 were Associate , 319 were Bachelor of Science and 34 were Master of Science. Before analyzing the data, presuppositions of multiple regression was assessed. Kolmogorov - Smirnov test was not significant for any of the variables, so the assumption of normality is established. The Variance inflation factor for all predictor variables was approximately one that has an interval of 10. The Durbin-Watson was equal to 1.06, which has interval from 0 and 4. Therefore, multicollinearity and waste correlation assumptions were rejected respectively, and multiple regression was used. Mean, standard deviation, minimum and maximum values were used for evaluating the descriptive index of job burnout variables, social support, psychological hardiness and quality of life of nurses, (Table 1).

Table 1: Descriptive indicators of job burnout, social support, psychological hardiness and quality of life of nurses

Variables	Mean ± SD	Minimum values	maximum values
Job burnout	۳.۵۷±۰.۸۷	۰.۰۰	۴.۳۷
Perceived Social Support	۴.۹۵±۱.۶۲	۱.۵۸	۵.۶۷
Psychological hardiness	۲.۶۲±۰.۸۹	۱.۲۴	۳.۹۲
Quality of life	۳.۲۴±۱.۰۳	۱.۶۵	۴.۶۹

Pearson correlation coefficient was used to investigate the relationship between job burnout, perceived social support, psychological hardiness and quality of life. The results showed that job burnout (r =-0.39) had negative and significant relationship with nurses' quality of life and perceived social support (r =0.61) and psychological hardiness (r =0.45) had notable and positive correlation with quality of life. The findings showed that job burnout had a negative and significant relationship with perceived social support and psychological hardiness. The perceived social support and psychological hardiness had positive and remarkable correlation with each other (P<0.01) (Table 2).

Table 2: The correlation coefficients of job burnout, social support, hardiness and quality of life of nurses (n= 400)

Variables	۱	۲	۳	٤
Job burnout	۱			
Perceived Social Support	-۰.۳٤**	۱		
Psychological hardiness	-۰.۲۹**	۰.۳۱**	۱	
Quality of life	-۰.۳۹**	۰.۶۱**	۰.٤۵**	۱

P<0.01

Simultaneous multiple regression model was used to investigate the roll of job burnout, perceived social support, hardiness in prediction of quality of life of nurses. The results indicated that the predictor variables could predict 59.3 percent of the changes in quality of life significantly. In this model, job burnout had an inverse and significant role in predicting nurses' quality of life, but social support and hardiness had a direct and remarkable role in predicting their quality of life. Also social support had the most and job burnout had minimal role in prediction of quality of life of nurses (Table 3).

Table 3: Results of simultaneous multiple regression analysis model to predict the quality of life of nurses

Predictor variables	R	R^2	F statics	Df	P-Value	β	P-Value
Job burnout	۰.۷۷۰	۰.۵۹۳	۵۳.۲٤۹	۳ ۳۹۶	0.0001	-۰.۲۱۷	۰.۰۰۵
Perceived social support						۰.۳٤۱	۰.۰۰۱
Psychological hardiness						۰.۲۹۵	۰.۰۰۲

Discussion

The results indicated that job burnout and quality of life had significant and negative relationship that were in consistency with The findings of several studies (9-12). In the results of Weight et al research (2013) quality of life inversely correlated with job burnout (10). In the Hajloo research (2012), job burnout had negative and significant relationship with quality of life (12). Articulating these findings, we can say stress exists in all occupations and job burnout is the result of repeated stress that appears as physical symptoms (headaches, stomach ulcers etc.), psychological symptoms (depression, anger, etc.) and behavioral symptoms (absenteeism, loss of function and so on). People suffering from burnout are often tired and have little strength to work, feel inefficiency and helplessness, and are suspicious of others. As a result, these people see the world more negative, which reduces the quality of life. Another explanation: Following the increment of emotional exhaustion and negative mental energy (job burnout) a sense of suspicion is increased among nurses than to try; therefore, this situation leads them to high anxiety and depression and decrease the individual achievements that it firstly reduces a person's health and ultimately reduce their quality of life (34). Results also showed a significant and positive relationship between social support and quality of life that were consistent with the findings of previous studies (17-20). The results of Paterson and colleagues study (2013) showed that social support had negative and remarkable correlation with quality of life (18). The results of Shareh and colleagues study (2012) showed that the quality of life and perceived social support had correlated positively and notable (21). By articulating these findings, we can claim that social support can be a shield against the overwhelming events. This component can reduce isolation and brings about a sense of self-esteem and worthiness. Whatever a perception of support is high , the people feel more satisfied, which increases the quality of life. In other word, social support causes a person know that other people like him or her. Furthermore, he is cared,

respected and belonging to a network of communication. These things help people to cope with environmental pressures and put them in a comfortable position and ultimately enhance their quality of life.

The results of Gharehzad Azari et al research (2013) showed that hardiness and had a direct and significant correlation with quality of life (25). Also research of Ayoubi and colleagues (2010) indicated that hardiness, quality of life and sense of well-being were positively and significantly correlated (26). Hardiness is a combination of beliefs about yourself and the world. Tenacious people are aware of their value and importance in activities, consider the life events predictable and controllable and believe that their efforts can affect the environment and know the changes as a natural aspect of life. They solve the problems with their efforts. Such these beliefs initially increase the flexibility and tolerance and then increase the quality of life. In another word, tenacious people are the ones with positive personality traits that assess the stressful situation more positive and more controllable. This kind of appraisal causes a reduction in physiological arousal ,produced by the negative assessment of events, in tenacious people. Firstly, this factors decreases physiological arousal and ultimately enhances the quality of life. Other findings showed that social support, hardiness and job burnout play an important role in predicting the quality of life, respectively. Our results in the field of social support was in consistency with Wu et al (2015) (17) and Jalileans et al (2013) (20) and were not in line with research of Heidarzadeh et al (2013) (35). For instance, though Sosin et al (2014)(9) and Hajlo reported that social support could predict the quality of life but Heidarzadeh et al (2013)(34) reported that social support could not predict the quality of life significantly. Due to conduction of Heidarzadeh et al (2013)(34) study on cardiac patients, their result were not in consistency with the results of other research. The thing which is important in social support is the perception of support. Sometimes supports are inappropriate and maybe considered as pathos. In these individuals, the relationship between social support and quality of life is

low and social support cannot play an important role in predicting the quality of life. The results were aligned in the field of capability of hardiness with Gharehzad Azari et al (2013) (25) and Aghayousefi and Shahande (2012) (27). Moreover , they were in consistency with Sosin et al (2014) (9) and Sepahmansour et al. (1391) (11) studies. In explaining the power of predictor variables in predicting quality of life, we can say the people who are loved, supported and respected by family members, friends and others (people with social support), the people who have the power to control life events instead of avoiding the problems and consider them as opportunities for growth (those with hardiness), and those who have less stress , less chaotic and busy mind (for those with low job burnout) have less stress in life. They confront with challenges and when encounter with stressful event can overcome the problems with the help of others or lonely. In total, these people have higher self-esteem and These factors bring about that social support, hardiness and job burnout variables have the capability of prediction of quality of life significantly. The first limitation of this study was the use of multistage cluster sampling method. Another limitation was the selection of just morning shift nurses of public hospitals of Tehran. It is suggested that more precise sampling methods were used in future studies. Also it is proposed that this study to be conduct on the nurses at night shift or the nurses in other cities in order to generalize the results confidently.

Conclusion

The results show that job burnout can predict negatively and psychological hardiness and perceived social support can predict positively quality of life of the nurses , with the highest power for social support. Thus, the perceived social support plays a major role in prediction of quality of life. This means that how much is the individuals' perception of affection, companionship and attention from family, friends and others. Therefore, it is suggested that the planners and managers design appropriate programs to improve the quality of life of nurses. For this purpose, job burnout to be reduced via reduction of job stress , and social support and hardiness to be increased by the provision of welfare programs and training packages, respectively. Also nursing executives, counselors, therapists should pay attention to the signs and effects of job burnout, social support and hardiness variables and design and implement suitable programs for improving the quality of life of nurses.

Acknowledgements

References

1. Pour S. [Exploring psychological stressors with regard to the moderating role of perceived social support in Female nurses of hospital emergency department]. Iran Occup Heal 2013; 10(4): 65-74. [In Persian]
2. Kowalski CH, Ommen O, Driller E, Ernstmann N, Wirtz MA, et al. Burnout in nurses - the relationship between social capital in hospitals and emotional exhaustion. J Clin Nurs 2010; 19: 1654-63.
3. Cepeda-Valery B, Cheong AP, Lee A, Yan BP. Measuring health related quality of life in coronary heart disease: The importance of feeling well. Int J Cardiol 2011; 149(2): 4–9.
4. World Health Organization. The world health organization quality of life (WHOQOL)-BREF. Geneva: World Health Organization; 2004.
5. Karanikola MN, Papathanassoglou EE. Exploration of the burnout syndrome occurrence among mental health nurses in Cyprus. Arch Psychiat Nurs 2013; 27(6): 319-326.
6. Schufeli WB, Maslach C, Marek T. The future of burnout, In: Schaufeli WB, Maslach C, Marek T. professional burnout: recent developments in theory and research. Washington DC: Taylor & Francis; 2004.
7. Maslach C, Jackson S. The measurement of experienced burnout. J Occup Behav 2008; 2: 99-113.
8. Boyas J, Wind LH, Kang SY. Exploring the relationship between employment-based social capital, job stress, burnout, and intent to leave among child protection workers: An age-based path analysis model. Children & Youth Servi Rev 2012; 34(1): 50-62.
9. Sosin M, Pulcrano ME, Shara N, Evans SR. Quality of life and burnout rates across surgical specialties: a systematic review and meta-analysis of the current literature. J Ame College Surgeons 2014; 219(4): 141-149.

10. Weight CHJ, Sellon JL, Lessard-Anderson CR, Shanafelt TD, Olsen KD, Laskowski ER. Physical activity, quality of life, and burnout among physician trainees: the effect of a team-based, incentivized exercise program. Mayo Clin Proceed 2013; 88(12): 1435-1442.

11. Sepah Mansoor M, Shahriyari Ahmadi M, Shahami N. [The relationship between quality of life, job satisfaction and job burnout in teachers]. J Educ Manage Res 2012; 3(3): 91-110. [In Persian]

12. Hajloo N. [The relationship between job stress, job burnout and life quality of employees with satisfaction of organizational climate in Mohaghegh Ardebili University]. New Appro Educ Manage 2012; 3(3): 169-183. [In Persian]

13. Charyton C, Elliott JO, Lu B, Moore JL. The impact of social support on health related quality of life in persons with epilepsy. Epilep Behav 2009; 16(4): 640-645.

14. Chadwick KA, Collins PA. Examining the relationship between social support availability, urban center size, and self-perceived mental health of recent immigrants to Canada: a mixed-methods analysis. Soc Sci & Med 2015; 128: 220-230.

15. Martinez Garcia MF, Garcia Ramirez M, Maya Jariego I. Social support and locus of control as predictors of psychological well- being in Moroccan and Peruvian immigrant women in Spain. Int J Intercul Relat 2002; 26: 287–310.

16. Xu J, Ou L. Resilience and quality of life among henchman earthquake survivors: the mediating role of social support. Public Heal 2014; 128(5): 430-437.

17. Wu X, Chen J, Huang H, Liu Z, Li X, Wang H. Perceived stigma, medical social support and quality of life among people living with HIV/AIDS in Hunan, China. Appl Nurs Res 2015; 28(2): 169-174.

18. Paterson C, Jones M, Rattray J, Lauder W. Exploring the relationship between coping, social support and health-related quality of life for prostate cancer survivors: A review of the literature. Euro J Oncol Nurs 2013; 17(6): 750-759.

19. Shareh H, Soltani E, Ghasemi A. [Prediction of quality of life of non–insulin dependent diabetic patients based on perceived social support]. Zahedan J Res Med Sci 2012; 14(2): 82-85. [In Persian]

20. Jalilian M, Mostafavi F, Sharifirad G. [Relation between general self-efficacy and perceived social support with quality of life in heart-coroner patients: a cross-sectional study]. J Heal Sys Res 2013; 19(5): 531-539. [In Persian]

21. Delahaij A, Gaillard C, Van Dam P. Hope and Hardiness as related to life satisfaction. J Posit Psychol 2010; 3(8): 171-179.

22. Sheard M, Golby J. Hardiness and undergraduate academic study: The moderating role of commitment. J Pers Indivi Differ 2007; 35: 579-588.

23. Maddi SR. Hardiness: The courage to grow from stresses. J Posit Psychol 2006; 1: 160-168.

24. Bahamin GH, Taheri F, Moghaddas AR, Sohrabi F, Dortaj F. The effects of hardiness training on suicide ideation, quality of life and plasma levels of lipoprotein in patients with depressive disorder. Soc Behav Sci 2012; 46: 4236-4243.

25. Gharehzad Azari M, Ghorban Shirudi SH, Khalatbari J. Relationship of hardiness training with anxiety and quality of life of pregnancy women. Soc Behav Sci 2013; 84(9): 1785-1789.

26. Aubi S, Teimory S, Nayyeri M. [Hardiness, quality of life and well-being]. Dev Psychol: Iran Psychol 2010; 6(24): 353-360. [In Persian]

27. Aghayousefi A, Shahandeh M. [The relationship between anger, psychological hardiness and quality of life in coronery heart disease patients]. Heal Psychol 2012; 1(3): 1-11. [In Persian]

28. Momeni M, Ghayoumi AF. [Statistical analysis with SPSS] (3rd ed.). Tehran: Momeni Publications 2010; 226. [In Persian]

29. Ahqar G. [The study of school organizational climate role on job stress in Tehran secondary school consultants]. Consu News & Res 2007; 23: 25-40. [In Persian]

30. Zimet GD, Dahlem NW, Zimet SG, Farley GK. The multidimensional scale of perceived social support. J Pers Assess 1988; 52: 30-41.

31. Souri A, Ashoori J. [The relationship between perceived social support, psychological hardiness and family communication patterns with quality of life among patients with type II diabetes]. J Nurs Diabetes 2015; 3(2): 53-65. [In Persian]

32. Kobasa SC. Stressful life events, personality and health: An inquiry into hardiness. J Pers & Soc Psychol 1979; 37: 1-11.

33. Pourakbari F, Khajevand Khoshli A, Asadi J. [Relationship of psychological hardiness and quality of life with death anxiety in nurses]. J Res Dev Nurs & Midwi 2014; 11(2): 53-59. [In Persian]

34. Yavari M, Shamsaei F, Yazdanbakhsh K. [Comparison psychiatrics nurses' burnout and general health with critical care (ICU) nurses]. J Nurs Manage 2014; 3(1): 55-65. [In Persian]

35. Heidarzadeh M, Hasani P, Rahimzadeh A, Ghahramanian A, Kolahdouzi Pour J, Yousefi I. [Quality of life and social support in congestive heart failure patients and healthy people]. Holitic Nurs & Midwi J 2013; 23(1): 13-21. [In Persian]