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Assessment of Predictable Productivity of Nurses Working in Kerman University of Medical Sciences' Teaching Hospitals via the Dimensions of Quality of Work Life

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Abstract

Introduction: Despite the existence of a large community of nurses, specific mechanisms have not been developed yet to consider their needs and the quality of their work life. Moreover, few studies have been conducted to analyze the nature of nursing, nursing places or nurses' quality of work life. In this regard, the present study aimed to assess predictable productivity of nurses working in Kerman University of Medical Sciences' teaching hospitals via the dimensions of Quality of Work Life.

Methodology: The present descriptive-correlational study was conducted to assess predictable productivity of nurses via the dimensions of Quality of Work Life. The study's population consisted of all nurses working in different wards of teaching hospitals associated with Kerman University of Medical Sciences. Out of the whole population, 266 nurses were selected based on the simple random sampling method. To collect data, the questionnaires of 'Quality of Nursing Work Life' and 'Productivity' were used after confirming their reliability (test-retest) and content validity. Finally, the collected data were analyzed through the SPSS software (version 16).

Results: Although the quality of work life for nurses was average and their productivity was low but the results showed that quality of life is directly related to nurses' productivity. Quality of life and its dimensions are predictive factors in the in the nurses' productivity.

Conclusions: It can conclude that by recognizing the nurses' quality of work life situation, it can realize this group productivity and their values to the efficiency of the health system. For the quality of working life improvement and increasing nurses' productivity more efforts are needed by authorities. The findings can be applied by managers of hospitals and nursing services along with head nurses to enhance the quality of health services and nursing profession in general.

Keywords: quality of work life, productivity, nurse

1. Introduction

As a complex concept, quality is influenced by the time, location and individual/social values. The Quality of Work Life (QWL hereafter) is an essential factor to attract and retain employees in any organization (Pratama, 2016). In modern management, the concept of QWL has become a global social issue (Lu, Huang, & Bond, 2016). Planning for QWL includes any attempt to advance organizational culture and employees' growth (Fagan, 2001). As a result, investing in employees has been considered as the most important variable in all equations related to strategic management (Holden et al., 2011). The findings of previous studies have shown that such investments decrease staff's complaints, the rate of absenteeism from work and the need for disciplinary regulations and increases staff's positive attitude and participation in other suggested programs (Guler & Kuzu, 2009). Moreover, considering the staff's needs improves organizational long-term productivity (Adams, Bessant,

& Phelps, 2006).

Nurses need to be considered as the most important resources in the hospitals and their motivation must be strengthening all the time (Nayeri, Salehi, & Noghabi, 2011). Nurses' QWL must be focused by all hospital managers in order to ensure the sustainability of their health care systems (Adams et al., 2006). A QWL program is a process through which all organizational members can interfere in the decisions affecting their jobs and their working places through appropriate virtual communication channels designed for this specific purpose; this process will increase the personnel's participation and satisfaction and reduce their work-related stress (Hanlon & Gladstein, 1984). In fact, QWL represents a kind of organizational culture or management strategy based on which, the personnel feel ownership, autonomy, responsibility and self-esteem (Fakhrutdinova, Safina, Shigapova, & Yagudin, 2013). However, there are differences in what the hospitals do to create these feelings in their employees (Helmer & Suver, 1988). Generally, in an organization which is known for having a successful program regarding the QWL, there is a tendency for giving and receiving suggestions leading to any kind of improvement (Hoffman & Mehra, 1999). In such an atmosphere, creative dissatisfaction is considered as a sign of respect and compassion rather than criticism (Helmer & Suver, 1988). In light of what was mentioned, it can be stated that the QWL means the ability to satisfy more personal needs and to help the employees feel secure, useful and accepted by others; so that they can live safely and have the opportunity to enhance their knowledge and skills (Rudaki, 2009). Various studies have showed that the nurses' QWL need to reform because it has average level in Iran and the majority of nurses are not completely satisfied with their QWL, therefore, the need to improve the QWL for nurses is a definite necessity (Habibzadeh, Ghorbanzadeh, Khalkhali, & Mohamadpor, 2012; Hasam et al., 2012, Navidian, Saber, Amin, & Kianian, 2014; Salamzade, Mansouri, & Farid, 2008). One important goal of any organization is the quality improvement which in todays' competitive situations, organizations should consider increasing productivity. In fact, the productivity is a culture, a logic attitude to work and life which its goal is to work smarter to achieve for better and excellence life (Iranzadeh & Tahouni, 2014). Organizations and personnel productivity is more important in health system because the health system is the protective the primary core of community mean workforce. In this regard, the efficiency and productivity of nursing personnel is an important issue that affecting the country's whole health organization because the nurses are the largest of human resources at the health system and they have a basic role in the care continuum and health promotion. Productivity of this group is one of the largest challenge for health organizations managers who are intended to increase the quality of services and cost decreasing (Navidian, Saber, & Kianian, 2015; Salamzadeh et al., 2008). Hospitals are places to take care of patients with complex needs; thus, the productivity of nurses, as important human resources in the health care system, is an important issue (Hall, 2003). Despite the importance of productivity, Iranian researchers have reported its decline in recent years (Kooshki, Sari, Arab, & engali, 2013). On the other hand, low productivity leads to issues such as low income, inflation, unemployment, and falling living standards (Barati, 1996). In a study, Swart showed that flexible working hours play an important role in increasing employees' productivity (Swart, 1985). Thomson and Stanowski concluded that higher productivity levels of nurses reduce the rate of hospital infections and nurses' turnover and increase effective use of nursing workforce and patients', nurses' and doctors' satisfaction (Thompson & Stanowski, 2009). Studies carried out in different contexts revealed that nurses consider different indicators as influential in their QWL in different situations (Bloom, Kretschmer, & Van Reenan, 2009). Hence, conduction a research which can predict the nurses' productivity by using the QWL dimensions seems necessary.

2. Materials and Methods

The present descriptive-correlational study was conducted to assess predictable productivity of nurses via the dimensions of QWL. The study's population consisted of all nurses working in different wards of teaching hospitals associated with Kerman University of Medical Sciences (n=789). Out of the whole population, 266 nurses were selected based on the simple random sampling method. Then, the questionnaires were distributed among the participants in proportion to their population in each hospital. With regard to the purpose and nature of the study, three questionnaires were used for data collection:

1) ***A general information questionnaire*** was including questions about age, gender, marital status, educational level, work experience and history of turnover.

2) ***The Quality of nursing work life questionnaire*** consisting of 42 items answered on a 6-point Likert scale. Out of the whole 42 questions, eight questions assess the dimension of personal life, 10 questions assess the dimension of work framework, twenty items assess the dimension of work field and six questions assess the dimension of global work (Brooks & Anderson, 2005). Using Cronbach's alpha, the reliability coefficients were reported in the ranges of 0.56-0.88 in the original study, 0.50-0.87 in the study conducted by Azarrang et al. (Azarrang, Yaghmaei, & Shiri, 2013) and 0.75-0.93 in the study has done by Khani et al. (Khani, Jaafarpour, &

Dyrekvandmogadam, 2008). In this study, after translation, the questionnaire was offered to 10 experts and scholars inside and outside Kerman University of Medical Sciences. They assessed it and gave comments. Their recommendations were considered. After confirming the validity of the content, the questionnaire was examined on a sample consisting of twenty nurses and finally approved. The obtained Cronbach's alpha was 0.71 (for the dimension of global work), 0.91 (for the dimension of personal life). The test-retest reliability was 0.67 (for the dimension of work framework), 0.88 (for the dimension of work field).

3) ***The Productivity of Human Resources questionnaire*** provided by Dehghan Nayeri (Nayeri, Salehi, & Noghabi, 2011) consists of 25 item assessing nurses' productivity on a 5-point Likert scale. The content validity of the scale has been previously confirmed by Dehghan Nayeri and colleagues. However, in the present study, the questionnaire was offered to 10 experts and scholars inside and outside Kerman University of Medical Sciences and their recommendations were considered. The obtained Cronbach's alpha was in the range of 0.79-0.89 and its test-retest reliability was in the range of 0.80-0.89.

After data collection, central tendency and dispersion were used to describe the quantitative data and frequency and percentage were used to describe the qualitative data. Finally, to answer the study's questions, Pearson correlation and stepwise linear regression analyses were used.

3. Results

Demographic characteristics of the participants are presented in Table 1.

Table 1. Demographic characteristics of the participants

Variable		Number	Percentage
Age	Less than 30 years	84	31.6
	30 to 40 years	131	49.2
	More than 40 years	51	19.2
	Total	266	100
Gender	Male	73	27.4
	Female	193	72.6
	Total	266	100
Marital status	Married	186	69.9
	Single	72	27.1
	Divorced	8	3
	Total	266	100
Child(ren)	With child(ren)	146	54.9
	Without child(ren)	120	45.1
	Total	266	100
Educational level	B.S	242	91
	M.S	24	9
	Total	266	100
Hospital ward	General	171	64.1
	Intensive care	54	20.3
	Psychiatry	41	15.6
	Total	266	100
Position	Nurse	203	76.3
	Staff	32	12
	Head nurse	31	11.7
	Total	266	100
Shift	Rotating	200	75.2
	Fixed-morning	33	12.4
	Fixed-afternoon	21	7.9
	Fixed-night	12	4.5

	Total	266	100
Job experience	Less than 5 years	71	26.7
	6 to 10 years	67	25.2
	11 to 15 years	56	21.1
	16 to 20 years	45	16.9
	More than 21 years	27	10.2
	Total	266	100
Nursing as a second job	Yes	31	11.7
	No	235	88.7
	Total	266	100
Other professions as a second job	Yes	13	4.9
	No	235	95.1
	Total	266	100
History of turnover	Yes	30	7.5
	No	236	92.5
	Total	266	100

The results also indicated an average QWL (mean: 146.97; SD: 45.14) and a lower than average productivity level (mean: 62.66; SD: 22.00) for the examined nurses. In fact, almost 89.5% of the nurses had low levels of productivity. Statistical indicators of productivity, QWL and its dimensions are presented in Table 2.

Table 2. Statistical indicators of productivity, QWL and its dimensions

Variables	Mean/SD	range of score
Productivity	62.66/22.00	25-125
QWL	146.96/45.14	42-252
Personal life dimension	22.04/7.85	7-42
Work framework dimension	32.31/11.11	10-60
Work field dimension	75.63/22.45	20-120
Global work dimension	16.95/5.56	5-30

According to the results, in the dimension of personal life, 83.5% of the participants complained about the lack of sufficient vacation time; the highest satisfaction level was related to negative impacts of rotating shifts (42.9%). In the dimension of work framework, 85.3% of the participants complained about the lack of work force in their working environments; the highest satisfaction level was related to providing high quality health care services for the patients (76.7%). In the dimension of work field, 78.2% of the participants complained about non-respectful behaviors of the doctors towards the nurses; the highest satisfaction level was related to the importance of having a friendly relationship with colleagues (84.6%). In the dimension of global work, 86.8% of the participants complained about inadequate salary and benefits; the highest satisfaction level was related to the feeling of job security (82.3%).

The results indicated a positive significant correlation between QWL and nurses' productivity level ($r=0.96$; $p=0.001$) and other significant relationships between the dimensions of QWL and productivity level. Among the dimensions of QWL, the dimension of work field showed the highest correlation with nurses' productivity (Table 3).

Table 3. Correlation coefficients between productivity and QWL dimensions

Pearson correlation (p value)	productivity	QWL	Personal life dimension	Work framework dimension	Work field dimension	Global work dimension
Productivity	1					
QWL	R=0.96 p=0.0001	1				
Personal life dimension	R=0.90 P=0.0001	R=0.99 P=0.0001	1			
Work framework dimension	R=0.93 P=0.0001	R=0.99 P=0.0001	R=0.98 P=0.0001	1		
Work field dimension	R=0.94 P=0.0001	R=0.99 P=0.0001	R=0.98 P=0.0001	R=0.99 P=0.0001	1	
Global work dimension	R=0.91 P=0.0001	R=0.99 P=0.0001	R=0.98 P=0.0001	R=0.99 P=0.0001	R=0.99 P=0.0001	1

To evaluate the predictive power of the QWL dimensions to predict productivity of the nurses, a linear regression model was used. The results indicated a significant correlation between the QWL scores and productivity of the nurses (r=0.96; p=0.001). Moreover, the dimensions of QWL could predict 75% of the nurses' productivity level.

According to the results, the highest predictive power belonged to the overall QWL scores and then the dimensions of work field, work framework and personal life had the highest predictive power respectively. The QWL dimension of global work could not predict the productivity of the nurses (p>0.05).

4. Discussion

It was also shown that almost half of the participants experienced an average QWL which was in line with the results of another study conducted by Dehghan Nayeri et al. that evaluated the nurses' QWL score at average level. The reason for this similarity is Iranian environment and society because QWL is something that can be expected that such factors affect people's perception of QWL. It was also indicated that only 7% of the examined nurses were enjoying a good QWL. The results concerning the analysis of the dimensions of QWL indicated that most of the nurses were experiencing a low level of QWL in the dimensions of personal life, work framework and global work and an average level of QWL in the dimension of work filed (Khojasteh et al., 2016). These findings were consistent with the findings of Salamzadeh et al. who reported that 46% of their participants were dissatisfied with their QWL and only 0.3% were partially satisfied (Salamzadeh et al., 2008). Perhaps the reasons for the QWL decreasing in the several of QWL are high workload, frequent shifts and off-day shortage holidays (Rbabisarjou, Kord, & Ansari, 2015). Also, the shortage of nursing staff and insufficient pays insufficient to work difficulty could be the reasons for the current situation. The human resource maintenance system has many dimensions and the recognition of maintaining dimensions are very difficult in the organizations. The maintenance factors of personnel are related to health, safety, well-being physical education, insurance and medical services (Arbabisarjou, 2012). The reinforcement of the human spirit and preservation of human dignity have mainly psychological, spiritual, and religious dimensions (Dargahi & Yazdi, 2007). Similarly, Essin et al. (2002) showed that only 19.3% of their examined nurses were satisfied with their work status (Essin, Larsson, Oberg, & Sjoden, 2002). On the other hand, Fallahee Khoshknab et al. specified that 21% of their participants were experiencing an average level of QWL while more than half of them were enjoying a satisfying level of QWL which was not in line with the results of the current study. They conducted their study on a group of nurses working in psychiatry sections of teaching hospitals associated with Tehran University of Medical Sciences whereas the population in the present study consisted of all nurses working in different wards of teaching hospitals associated with Kerman University of Medical Sciences. Accordingly, different population can be considered as a possible source of the mentioned inconsistencies.

According to the results of the present study, the mean and Standard Deviation of the productivity scores of the examined nurses was 62.66 and 22.00 respectively. In general, the results showed a low level of productivity (91%) of the participants had an average or a lower than average level of productivity). This finding was consistent with the results of the study conducted by Dehghan Nayeri et al. in which they reported that their examined nurses were not productive and most of their energy was spent on administrative or secretarial issues

(Nayeri et al., 2011). Salam Zadeh and colleagues also found similar results (Salamzadeh et al., 2008). Working life and personal life influence each other and problems in these two areas clearly lead to professional difficulties, job dissatisfaction, stress and organizational unproductivity (Barbera & McConnell, 1990). Research results also showed that the use of poor management practices and lack of support and care about the nurses' views are among the causes of their low productivity. On the other hand, good relations and support (Houser, 2003) in addition to the establishment of performance-based bonus systems, continuous monitoring and proper evaluation can increase the nurses' productivity (Khojasteh et al., 2016; Hoffman & Mehra, 1999).

5. Conclusions

It can be concluded that the efforts to improve the QWL and its dimensions can improve the productivity of the community worthy group, and stride a major step in improving the community health. Health care managers should focus on morality and skill-based performance of both nurses and physicians in order to provide a more human-based and collaborative working environment. For this purpose, head nurses and physicians must behave appropriately in their workplace and consider it as a learning environment. Moreover, due to the existing resistance economy in the country, pressure must be exerted to simultaneously control costs and improve the effectiveness of health care practices. For that purpose, issues related to poor QWL must be reflected and solved since they affect many aspects of the employees' life other than their productivity. Therefore, managers and authorities must try to enhance the QWL by considering the impacts of its dimensions on the employees' satisfaction and productivity.

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Conflict of Interest

The authors declare that there is no conflict of interests regarding the publication of this paper.

References

Adams, R., Bessant, J., & Phelps, R. (2006). Innovation management measurement: A review. *International Journal of Management Reviews, 8*(1), 21-47. http://dx.doi.org/10.1111/j.1468-2370.2006.00119.x

Arbabisarjou, A. (2012). *Practical Leadership and Management in Nursing (Translated)*. Tehran: Nashre Jameanegar.

Arbabisarjou, A., Kord, F., & Ansari, H. (2015). Sleep quality in nurses working in different shifts. *Der Pharmacia Lettre, 7*(9), 305-309.

Azarrang, S., Yaghmaei, F., & Shiri, M. (2013). Correlation dimensions of quality of work life of nurses and demographic characteristics. *Iranian Journal of Nursing Research, 7*(27), 18-24.

Barati, A. (1996). Productivity growth and organizational progress and development. *Journal of Public Administration, 1*(28), 41-53.

Barbera, A. J., & McConnell, V. D. (1990). The impact of environmental regulations on industry productivity: Direct and indirect effects. *Journal of Environmental Economics and Managemen, 18*(1), 50-65. http://dx.doi.org/10.1016/0095-0696(90)90051-Y

Bloom, N., Kretschmer, T., & Van Reenan, J. (2009). *Work-life balance, management practices and productivity International differences in the business practices and productivity of firms* (pp. 15-54). University of Chicago Press. http://dx.doi.org/10.7208/chicago/9780226261959.003.0002

Brooks, B., & Anderson, M. (2005). Defining quality of nursing work life. *Nursing Economics, 23*(6), 319.

Dargahi, H., & Yazdi, M. S. (2007). Quality of work life in Tehran University of Medical Sciences Hospitals' clinical laboratories employees. *Pakistan Journal of Medical Sciences, 23*(4), 630.

Dehghan Nayeri, N., Salehi, T., & Ali Asadi Noghabi, A. (2011). Quality of work life and productivity among Iranian nurses. *Contemporary Nurse, 39*(1), 106-118. http://dx.doi.org/10.5172/conu.2011.39.1.106

Essin, L., Larsson, G., Oberg, K., & Sjoden, P. (2002). Satisfaction with care: Associations with health-related quality of life and psychosocial function among Swedish patients with endocrine gastrointestinal tumors. *European Journal of Cancer Care, 11*(2), 91-99. http://dx.doi.org/10.1046/j.1365-2354.2002.00293.x

Fagan, C. (2001). Time, money and the gender order: Work orientations and working-time preferences in Britain.

Gender, Work & Organization, 8(3), 239-266. http://dx.doi.org/10.1111/1468-0432.00131

Fakhrutdinova, E., Safina, L., Shigapova, D., & Yagudin, R. (2013). Legislative provision of the quality of working life in Russia. *World Applied Sciences Journal, 27*(13), 92-96.

Guler, N., & Kuzu, F. (2009). The health-related quality of life of the health professionals working in the primary healthcare centers and its correlation with selected sociodemographic factors in Sivas, a central Anatolian city. *Age (years), 20*(29), 30-39.

Habibzadeh, H., Ghorbanzadeh, K., Khalkhali, H., & Mohamadpor, Y. (2012). The Relationship Betweennurses'quality of Work Life and Their Clinical Competency. *Journal of Urmia Nursing and Midwifery Faculty, 10*(3), 0-0.

Hall, L. (2003). Nursing intellectual capital: A theoretical approach for analyzing nursing productivity. *Nursing Economics, 21*(1), 14.

Hanlon, M., & Gladstein, D. (1984). Improving the quality of work life in hospitals: A case study. *Hospital & Health Services Administration, 29*(5), 94.

Helmer, F. T., & Suver, J. D. (1988). Pictures of performance: The key to improved nursing productivity. *Health Care Management Review, 13*(4), 65-70. http://dx.doi.org/10.1097/00004010-198823000-00009

Hesam, M., Asayesh, H., Roohi, G., Shariati, A., Nasiry, H., & Shouribidgoli, A. (2012). Assessing the Relationship between Nurses'Quality of Work Life and Their Intention to Leave the Nursing Profession. *Quarterly Journal of Nursing Management, 1*(3), 28-36.

Hoffman, J. M., & Mehra, S. (1999). Management leadership and productivity improvement programs. *International Journal of Applied Quality Management, 2*(2), 221-232. http://dx.doi.org/10.1016/S1096-4738(99)80091-8

Holden, R. J., Scanlon, M. C., Patel, N. R., Kaushal, R., Escoto, K. H., Brown, R. L., ... Murkowski, K. (2011). A human factors framework and study of the effect of nursing workload on patient safety and employee quality of working life. *BMJ Quality & Safety, 20*(1), 15-24. http://dx.doi.org/10.1136/bmjqs.2008.028381

Houser, J. (2003). A model for evaluating the context of nursing care delivery. *Journal of Nursing Administration, 33*(1), 39-47. http://dx.doi.org/10.1097/00005110-200301000-00008

Iranzadeh, S., & Tahouni, A. (2014). The Relationship between quality of work life and productivity of employees. *Productivity Management, 7*(25), 67-80.

Khani, A., Jaafarpour, M., & Dyrekvandmogadam, A. (2008). Quality of nursing work life. *Journal of Clinical and Diagnostic Research, 2*(6), 1169-1174.

Khojasteh, F., Arbabisarjou, A., Boryri, T., et al. (2016). The relationship between Maternal Employemnt Status and Pregnancy outcomes. *Global Journal of Helath Science, 8*(9), 37-43. http://dx.doi.org/10.5539/gjhs.v8n9p37

Kooshki, M., Sari, A., Arab, M., & engali, K. A. (2013). Quality of working life and its relation with productivity of nurses' performance in Shahid Beheshti University of Medical Sciences hospitals. *Scientific Journal of School of Public Health and Institute of Public Health Research, 10*(4), 81-90.

Lee, D.-J., Singhapakdi, A., & Sirgy, M. J. (2007). Further validation of a need-based quality-of-work-life (QWL) measure: evidence from marketing practitioners. *Applied Research in Quality of Life, 2*(4), 273-287. http://dx.doi.org/10.1007/s11482-008-9042-x

Lu, Q., Huang, X., & Bond, M. H. (2016). Culture and the Working Life Predicting the Relative Centrality of Work across Life Domains for Employed Persons. *Journal of Cross-Cultural Psychology, 47*(2), 277-293. http://dx.doi.org/10.1177/0022022115615235

Navidian, A., Saber, S., & Kianian, T. (2015). Correlation of Job Satisfaction and Productivity of Nurses Working in Hospitals in Kerman University of Medical Sciences. *Journal of Health Promotion Management, 4*(1), 1-8.

Navidian, A., Saber, S., Rezvani Amin, M., & Kianian, T. (2014). Correlation of quality of work life and job satisfaction in nurses of Kerman University of Medical Sciences. *Journal of Health Promotion Management, 3*(2), 7-15.

Nayeri, N. D., Salehi, T., & Noghabi, A. A. (2011). Clinical nurses quality of work life and Productivity and relationships between them. *Contemporary Nurse, 39*(1), 23-34.

Pratama, M. D. (2016). The Related Applying Context Analysis Of Quality Of Work Life To Company'S Employee Satisfaction Based On Lion Superindo Indonesia Company'S Employee District Singosari Of Malang City In The Context Of Fenomonologist. *Jurnal Ilmiah Mahasiswa Feb, 4*(1).

Rudaki, M. (2009). *Dynamic Analysis of Quality of Work Life*. (MSc), Islamic Azad University, South Tehran.

Salamzadeh, Y., Mansouri, H., & Farid, D. (2008). The relationship between quality of work life and productivity of human resources in health care centers. *The Journal of School of Nursing and Midwifery, 6*(2), 60-70.

Swart, J. C. (1985). Clerical Workers on Flextime: A Survey of Three Industries. *Personnel, 62*(4), 40-44.

Thompson, P., & Stanowski, A. (2009). Maximizing nursing productivity the benefits of improved collaboration between nursing and support services. *Healthcare Financial Management: Iournal of the Healthcare Financial Management Association, 63*(1), 76-80, 82, 85.