

Access this article online

Quick Response Code:



Website:
www.jehp.net

DOI:
10.4103/jehp.jehp_612_20

Determining the relationship between emotional intelligence and interpersonal sensitivity with quality of work life in nurses

Saeed Tajigharajeh, Mehdi Safari¹, Tahere Sarbooz Hosein Abadi², Shoaib Sarbooz Hosein Abadi³, Mehdi Kargar⁴, Mahmoud Panahi⁵, Mahdi Hasani⁶, Zeinab Ghaedchukamei⁷

Department of Mental Health, Kalaleh Health Care Network, Golestan University of Medical Sciences, Kalaleh, Iran, ¹Department of Health in Disaster and Emergencies, School of Public Health and Safety, Shahid Beheshti University of Medical Sciences, Tehran, Iran, ²Department of Health Services Management, School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran, ³Department of Nursing, School of Nursing and Midwifery, Torbat Heydariyeh University of Medical Sciences, Torbat Heydariyeh, Iran, ⁴Department of Emergency Nursing, School of Nursing and Midwifery, Birjand University of Medical Sciences, Birjand, Iran, ⁵Department of Health Promotion, Faculty of Health, Shiraz University of Medical Sciences, Shiraz, Iran, ⁶Department of community Health Nursing, Infection Control Supervisor, Imam Khomeini Hospital of Saqqez, Kurdistan University of Medical Sciences, Sanandaj, Iran, ⁷Department of Health Services Management, Guilan University of Medical Sciences, Rasht, Iran

Address for correspondence:

Ms. Zeinab Ghaedchukamei, Department of Health Services Management, Guilan University of Medical Sciences, Parastar Street, Rasht, Iran.
E-mail: ghaedgolnaz@yahoo.com

Received: 08-06-2020
Accepted: 26-08-2020
Published: 31-05-2021

Abstract:

BACKGROUND: Emotional intelligence and interpersonal sensitivity are known as important nursing skills. They have significant role in the promotion of nurses working life and the health care which they provide. The goal of this study was the determination of the relationship between emotional intelligence and interpersonal sensitivity with quality of work life in nurses working in governmental hospitals of Tehran city in 2019.

MATERIALS AND METHODS: This investigation was a descriptive-analytical and correlation study which was conducted among 256 nurses working in five governmental hospitals in Tehran. The studied nurses were selected through in access sampling method. The instruments of research included demographic, emotional intelligence, interpersonal sensitivity, and work life quality questionnaires. The analysis of data was done by descriptive and deductive statistics (*t*-test and Pearson correlation coefficient) and also SPSS.

RESULTS: The conditions of emotional intelligence, interpersonal sensitivity, and work life quality of nurses were, in turn, in average, severe, and weak levels. The correlation between emotional intelligence and work life quality of nurses was significant ($P \leq 0.05$) and they were positively correlated with each other ($r = 0.311$). The relationship between interpersonal sensitivity and work life quality of nurses was significant ($P \leq 0.05$) and they were negatively correlated with each other ($r = -0.43$).

CONCLUSION: The development of emotional intelligence and sensitivity in reciprocally interpersonal relations of nurses lead to fundamental changes in nurses' attitude toward themselves, their colleagues, patients and their profession and can promote their work life quality. Therefore, these two skills are necessary for nurses and they should be taken into consideration by nursing schools, faculty members, instructors, and nursing managers.

Keywords:

Emotional intelligence, health behavior, hospital, interpersonal sensitivity, nurse, quality of life, training health professionals

Introduction

Health is an essential element for playing personal and social roles. All people can do their affairs well if they would be healthy and have proper level of life quality.^[1,2] Meanwhile, the staff as the main

power of organization play considerable role in its development and sustaining.^[3] Disregarding staff's physical and mental health in workplace, as crucial elements of work life quality, can lead to occupational tension, personnel conflict, disturbance in their health and inability in conducting their

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

How to cite this article: Tajigharajeh S, Safari M, Abadi TS, Abadi SS, Kargar M, Panahi M, *et al.* Determining the relationship between emotional intelligence and interpersonal sensitivity with quality of work life in nurses. J Edu Health Promot 2021;10:174.

duties, vulnerability in professional communication, dissatisfaction and finally, job quit job.^[4] Therefore, the quality of work life is known as one of the staffs importantly occupational aspects.^[5] Quality of work life is the satisfaction or dissatisfaction which nurses feel in different fields of their work life. It consists of physical health, psychological status, and personal belief, social and occupational relations.^[6] If the quality of personnels' work life is not suitable, they cannot take their own responsibilities in personal, familial, social, occupational, and organizational domains.^[7] Nurses, as the most populated human forces in health system and the frontline of providing health cares, have important role in promoting the quality of cares and productivity in health system.^[8,9] Consequently, the promotion of nurses' work life is defined as one of the significant factors in establishing the stability in health system.^[10] Promotion of nurses' work life quality means they can achieve their necessary and personal requirements through working in hospitals and attain their organizational goals.^[11] Perception and promotion of nurses' work life quality are a crucial factor in achieving high levels of cares provided for patients.^[12] As a result, managers' concentration on the modifiers of nurses' work life quality can supply more efficient human workplace. This is supposed to supply nurses' basic needs and also reach higher levels of productivity.^[13]

Nursing is a profession to assist other people and nurses should empower themselves in assessing the condition and predicting the results.^[14] Therefore, they need to have knowledge, experience, and skills to achieve this empowerment so that they can use fruitful information in solving problems, judging the affairs and making professional decisions.^[15] This helps them to provide safe services with higher quality by managing workplace conditions.^[16,17] Nurses require knowledge and skills in addition to learning how to interact with different behaviors and people.^[18] Consequently, emotional intelligence plays an important role in nurse's success and allows them to think more effectively in difficult situations. It also prevents from time wasting due to fear, anger, and anxiety to create new innovations.^[19] Emotional intelligence is defined as the ability of perceiving emotions and feelings to achieve rich feelings which can assist them to assess their own thoughts, emotions, and emotional and affective knowledge. They can use them to enrich their feelings and develop their intelligence.^[20] In other words, emotional intelligence is a series of abilities which are necessary for people success in personal and professional aspects of life.^[21]

Toyama and Mauno found positive relations between emotional intelligence and social support, participation in work affairs and creativity among nurses so that the more

emotional intelligence, the stronger relations among these variables in nurses.^[22] Kim *et al.* came to this conclusion that emotional intelligence had positive correlation with role conflict and occupational satisfaction. They also stated that nurse's role conflict should be managed by use of their emotional intelligence.^[23] Nurses seldom think of their decisions' rightness or falseness related to their profession's affairs. Hence, they have few readiness to face difficulties and challenges in work. In other words, most of their major problems are in their own workplace and are caused by their inappropriate decisions and judgment. In fact, the nurses having higher emotional intelligence, can handle occupational, social, personal, and emotional challenges more successfully and easier than their colleagues with less emotional intelligence.^[24] This can impact their quality of life considerably.

Another factor impacting nurses' work life quality is interpersonal sensitivity. This concept refers to the similarities which the individuals show in their perceptions, judgments, and responses toward each other.^[25] In other words, interpersonal sensitivity is the persons' ability of evaluating others' capabilities, emotional status, and also their characteristics related to nonverbal stimuli.^[26] However, it is known as a negative character and illogical awareness and oversensitivity towards others' behaviors and feelings. It is defined by disqualification feeling and repeating misinterpretation of others' interpersonal behaviors.^[27]

The people with higher interpersonal sensitivity in workplace are usually more pessimistic in comparison with others.^[28] They may interpret others' intentions in negative way. Hence, they often conflict with others.^[29] This leads other people to avoid them and their isolation accelerates. This cycle can result in receiving less social support and decrease their life quality.^[26] The researchers of British Columbia University came to this conclusion that higher mortality rate is seen among people with high level of interpersonal sensitivity. They suffer from heart diseases more and if they have immune system diseases, such as AIDS, their disease are more possible to progress.^[30]

High interpersonal sensitivity in nurses causes the sense of inefficiency, loneliness, irritability and failure in making their interpersonal relations and lead them to be paranoid towards colleagues. This enhances distrust feeling and the cycle continues. All these events affect staff's physical, mental, and spiritual health and may impact their work life quality. Since work life quality has important role in developing nurses productivity, providing health care, promoting hospitals' capabilities, and finding out its relation with emotional intelligence and interpersonal sensitivity is vitally significant, the results of the present investigation can be used

by hospitals' managers and policy-makers and also nursing managers to take into consideration the variables of work life quality, emotional intelligence, and interpersonal sensitivity among nurses. These three concepts can be utilized in promoting nurses health and their work life quality for reducing nurses quit job, occupational burnout, and finally, decreasing the quality of health care and organizational productivity. The present investigation was conducted to determine the relationship between emotional intelligence and interpersonal sensitivity with working life quality among nurses in some Tehran's governmental hospitals.

Materials and Methods

This is a descriptive-analytical and correlation type of study conducted in 2019 among nurses working in governmental hospitals of Tehran. The investigation was carried out in five hospitals which their names were coded as A, B, C, D, and E to respect confidentiality principles. Morgan table and in-access sampling method were used to select 256 nurses out of 750 nurses working in the mentioned hospitals.

For instance, the number of cases in hospital A was determined as follows:

256	750	→	A = 70
A	205		

The number of samples in hospitals B, C, D, and E were determined, in turn, 52, 47, 49, and 38 nurses based on the mentioned method.

The data collecting instruments included demographic, emotional intelligence, interpersonal sensitivity, and work life quality questionnaires.

Demographic questionnaire

It consisted of some items including gender, age, marital status, education level, and occupational history.

Shrink's emotional intelligence questionnaire

It had 33 questions and five dimensions including self-motivating, self-awareness, self-control, empathy, and social skills. The questions related to the mentioned dimensions were as follows: Self-motivating (questions 1, 9, 15, 20, 21, 26, 31), self-awareness (questions 6, 10, 12, 14, 24, 27, 32, 33), self-control (questions 2, 5, 11, 16, 18, 23, 30), empathy (questions 3, 4, 17, 22, 25, 29), and social skills (questions 7, 8, 13, 19, 28). Scoring this questionnaire was done by five-option Likert Scale (including always, often, sometimes, seldom, and never). If the respondents selected "always" option in questions 9, 10, 12, 14, 18, 20, 22, 28, and 33, they received score five. If respondents selected other options,

they received score 4, 3, 2, and 1, respectively. Scoring of other questions was reverse (always = 1, often = 2, sometimes = 3, seldom = 4, and never = 5). The range of scores was 33–165. The nurses achieved scores between 132–165, 99–131, 66–98, and 33–65, they had great, good, average, and poor levels of emotional intelligence, respectively.^[31-33]

Interpersonal sensitivity questionnaire

It was devised by Boyce and Parker^[34] and has five main domains including interpersonal awareness (questions 2, 4, 10, 23, 20, 30, 36), the need to be confirmed (6, 8, 11, 13, 16, 18, 20, 34), separation anxiety (1, 12, 15, 17, 19, 25, 26, 29), shamefulness (3, 7, 9, 14, 21, 22, 32, 33), and fragile self-internalization (questions 5, 24, 27, 31 and 35). This questionnaire has 36 questions and they are scored in a four-option scale from very high down to very low. Its total score is 144 and the scores of the mentioned domains are 28, 32, 32, 32, and 20, respectively. The scores between 88–144, 59–87, and 36–58 were presented severe, average, and poor levels of interpersonal sensitivity among respondents.

Quality of work life questionnaire

This questionnaire was devised by Dargahi *et al.*^[35] and has 30 questions. Every question is regarded as a modifier of working life quality. It was made by use of special references in human resources management. The questions are categorized into three options based on Likert Scale. They include dissatisfied, satisfied, and very satisfied. The scores of responses are measured from 0 to 100. Dissatisfied, satisfied, and very satisfied categories are supposed to be given scores <50, 50–75, and 75–100, respectively.

Since the questionnaires used in this study were standardized, their reliabilities were measured in previous investigations.^[25,31,35] Meanwhile, the validity of emotional intelligence questionnaire was measured in Mansouri,^[31] Ranjbar Ezzatabadi *et al.*,^[32] and Kouchakzadeh Talami *et al.*^[33] as follows, respectively: 0.85, 0.81, and 0.84. The validity of interpersonal sensitivity questionnaire was measured in Boyce and Parker's^[34] and Vojudi *et al.*'s studies^[25] as follows respectively: 0.85 and 0.81. The validity of working life quality was achieved 0.88 in Dargahi *et al.*'s study (0.88).^[35] The data analysis were done after inserting them into SPSS (version 18) by use of descriptive and deductive statistical tests (frequency, frequency percentage, mean, and *t*-test and Pearson correlation).

Results

In the present study, 256 nurses working in five Tehran's governmental hospitals stated their situation about emotional intelligence, interpersonal sensitivity, and work life quality through questionnaires. As shown in

Table 1, 67.18% of nurses were female, 60.54% of them were between 25 and 35 years old, 80.46% had B. S. level of education, 51.96% were married, and 44.53% worked between 6 and 10 years.

Table 2 presents the mean emotional intelligence score and its subscales among nurses. Findings showed that mean scores of self-motivating, self-awareness, self-control, empathy, social skill, and total emotional intelligence were, in turn, 18.74, 23.25, 16.24, 18.63, 14.46, and 91.32 (maximum scores of the mentioned items were 35, 40, 35, 30, 25, and 165, respectively). Since mean total emotional intelligence was 91.32 with 66–98 range, the nurses of the studied hospitals had average level of emotional intelligence.

Table 3 illustrates that the mean scores of interpersonal sensitivity's dimensions, as listed in the table,

Table 1: Demographic characteristics of the studied nurses

Variable	Statistical indices, frequency (%)
Gender	
Male	84 (32.82)
Female	172 (67.18)
Age (years old)	
20-25	32 (12.50)
26-30	94 (36.72)
31-35	61 (23.82)
36-40	43 (16.80)
Over 40	26 (10.16)
Education level	
B.S.	206 (80.46)
M.S.	42 (16.42)
Ph.D.	8 (3.12)
Marital status	
Single	105 (41.02)
Married	133 (51.96)
Widow	7 (2.73)
Divorced	11 (4.29)
Occupational history (years)	
1-5	62 (24.22)
6-10	114 (44.53)
11-15	63 (24.61)
16-20	14 (5.47)
Over 20	3 (1.17)

were 20.58, 27.63, 21.46, 22.86, 15.16, and 107.69, respectively (the maximum achievable scores of the mentioned dimensions were, in turn, 28, 32, 32, 32, 20, and 144). Since the mean score of total interpersonal sensitivity was 107.69 and its range was 88–144. The studied nurses showed to have high level of interpersonal sensitivity.

Table 4 presents that the mean score of the studied nurses' quality of work life was 48.82. It shows that they had the lowest supposed level of quality of work life.

The results of Pearson correlation test showed in Table 5 illustrated that the significant level of correlation of self-motivating's and empathy's dimensions was regarded more than 0.05 ($P \geq 0.05$). Hence, there was not significant correlation between self-motivating and empathy with working life quality. However, the significant level of correlation coefficient related to self-awareness, self-control, social skill, and total emotional intelligence was regarded <0.05 ($P \leq 0.05$). Therefore, there was significant correlation between these dimensions of working life quality. Based on correlation coefficient presented in the table, the correlation between these variables was positive. As far as the scores of dimensions are higher, the level of working life quality increases. The results showed that correlation coefficient of self-awareness is higher than 0.05 ($P \geq 0.05$). No significant correlation was seen between interpersonal awareness and working life quality. However, the significance level of correlation coefficient related to dimensions including need to confirmation, isolation anxiety, fragile self-internalization, and interpersonal sensitivity were <0.05 ($P \leq 0.050$).

As a result, there is direct and significant relation between these dimensions and working life quality. According to the observed correlation coefficient in the table, the correlation between these variables was negative. It means that the level of nurses' working life quality decreases by elevating the scores of these dimensions.

Discussion

The goal of this study was to determine the relation between emotional intelligence and interpersonal

Table 2: Mean and standard deviation of emotional intelligence and its dimensions in nurses

Variable	T difference					t	Degree of freedom	Result
	Mean	Total score	Mean difference	Confidence interval				
				Low level	High level			
Self-motivating	18.74	35	12.45	11.92	15.46	70.58	185	Average
Self-awareness	23.25	40	17.52	16.33	17.83	91.35	185	Average
Self-control	16.24	35	11.36	10.21	12.18	83.68	185	Weak
Empathy	18.63	30	13.24	12.72	13.87	78.24	185	Average
Social Skill	14.46	25	9.62	8.66	10.42	61.55	185	Average
Total emotional intelligence	91.32	165	83.26	81.54	85.72	134.61	185	Average

Table 3: Interpersonal sensitivity and its dimensions in nurses

Variable	T difference					t	Degree of freedom	Result
	Mean	Total score	Mean difference	Confidence interval				
				Low level	High level			
Self-motivating	18.74	35	12.45	11.92	15.46	70.58	185	Average
Self-awareness	23.25	40	17.52	16.33	17.83	91.35	185	Average
Self-control	16.24	35	11.36	10.21	12.18	83.68	185	Weak
Empathy	18.63	30	13.24	12.72	13.87	78.24	185	Average
Social skill	14.46	25	9.62	8.66	10.42	61.55	185	Average
Total emotional intelligence	91.32	165	83.26	81.54	85.72	134.61	185	Average

Table 4: The results of quality of work life in nurses

Variable	T difference					t	Degree of freedom	Result
	Mean	Total score	Mean difference	Confidence interval				
				Low level	High level			
Quality of work life	48.82	100	48.26	47.94	48.64	241.72	185	Weak

Table 5: The results of correlation test of emotional intelligence, interpersonal sensitivity and its dimensions with working life quality of nurses

Variable	Test	Quality of work life
Self-motivating	Correlation coefficient	0.162
	Significant	0.143
Self-awareness	Correlation coefficient	0.309
	Significant	0.02
Self-control	Correlation coefficient	0.284
	Significant	0.041
Empathy	Correlation coefficient	0.098
	Significant	0.115
Social skill	Correlation coefficient	0.336
	Significant	0.036
Total emotional intelligence	Correlation coefficient	0.311
	Significant	0.032
Interpersonal awareness	Correlation coefficient	-0.084
	Significant	0.13
Need to confirmation	Correlation coefficient	-0.382
	Significant	0.027
Isolation anxiety	Correlation coefficient	-0.362
	Significant	0.043
Isolation	Correlation coefficient	-0.403
	Significant	0.012
Fragile self-internalization	Correlation coefficient	-0.361
	Significant	0.018
Total interpersonal sensitivity	Correlation coefficient	-0.43
	Significant	0.038

sensitivity with nurses' working life quality in Tehran's governmental hospitals.

Based on the results, the situation of total emotional intelligence and dimensions including self-motivation, self-awareness, empathy and social skill were in the average levels. However, the situation of self-control dimension was weak. Ghaderi and Shamsi found in their study that nurses' emotional intelligence was appropriate. They stated that the programs for

emotional intelligence development in nurses lead to their personal and occupational development. This caused their productivity, improved patients' satisfaction and eventually, promoted the health of society. Their results showed that emotional intelligence in nurses was sufficient in comparison with the results of the present study. This can be owing to the differences of the background in environmental, cultural, and social conditions of the conducted studies.^[36] The findings of Kouchakzadeh *et al.*'s study illustrated that nurse's emotional intelligence was appropriate and more than present investigation. They believed that high emotional intelligence in nurses causes to increase self-efficacy and fosters nurses to carry out their duties more skillfully. One of the reasons of higher emotional intelligence reported in Kouchakzadeh *et al.*'s study can be attributed to nursing education after employment, development of interactive skills with clinical colleagues and patients by the assistance of wards' headquarters and repeating training courses.^[37] Shahbazi's study demonstrated that nursing students' emotional intelligence was not acceptable, because no reliable test is given to reveal its level. However, it can be improved by education.^[38] It should be noted that emotional intelligence can be developed in all persons.^[39,40] even an individual seems to lack emotional intelligence is potentially able to gain it by training.^[41] Although one part of emotional intelligence is intrinsic, the rest of that is achieved by human experiences. The latter part can be improved by effort and practice through psychotherapy, awareness development, and instructing.^[39] The results of Bakr and Safaan investigation showed higher level of nurses' emotional intelligence rather than the present study. The assessment of one's emotions, as an apart of emotional intelligence and others' emotional assessment received the highest mean levels. Moreover, optimism and adaptation received the lowest mean scores among emotional intelligence dimensions. The findings showed

that significant relation was seen between total score of emotional intelligence with nurse's occupational performance.^[42]

In the current investigation, the scores of total interpersonal sensitivity and its dimensions were high and the studied nurses had sever emotions in their reciprocal relations with others. No investigations have been conducted with regard to interpersonal sensitivity in nurses in health field in Iran. Most investigations conducted in Iran are associated with psychology and behavior therapy.

Narimani *et al.* stated that there was significant difference between the students with learning disability and normal students in respect of interpersonal sensitivity and its dimensions except for isolation anxiety. It means that the former students gained higher scores of interpersonal sensitivity and its dimensions in their relations with others in comparison with normal students. They attributed this difference to the possible negligence happened for students with learning disability. Their problem in communicating with others can be due to insufficient social skills.^[26] Vojudi *et al.* revealed that the people suffering from addiction had higher interpersonal sensitivity rather than individuals without addiction. They stated that the former persons tried to adapt their behaviors to others' behaviors, because they did not want to be isolated and criticized in groups. This happens for people with high level of interpersonal sensitivity. Hence, they suggested using the "isolation sensitivity" term instead of interpersonal sensitivity.^[25] Tajeri reported significant differences between the mean scores of interpersonal sensitivity and its dimensions in control and case groups. This score was lower in case group. They cited that problem-solving skill education could reduce interpersonal sensitivity with permanent impact.^[43]

Hicdurmaz and Oz studied nursing students to compare their interpersonal sensitivity after implementing cognitive-behavioral program. Their interpersonal sensitivity's scores were decreased after 4.5 months of performing cognitive-behavioral consult ($P = 0.001$). They suggested implementing regular and integrative consults for nursing students.^[44] Aydin and Hicdurmaz stated that the relation between nurse and patients is based on communication and hypersensitivity in reciprocal relations can make it complicated and damage the quality of cares. Since illness makes the patient sensitive and even irritable, interpersonal sensitivity can lead to depression and prolong the disease period. Hence, interpersonal sensitivity of patients and nurses should be balanced, because sufficient interpersonal sensitivity can impact nursing cares process, healing of patients and their mental health positively.^[45]

The results of this investigation showed that the studied nurses were not satisfied with their working life quality and they have been experienced its lowest possible level. Dargahi *et al.*'s results indicated that two-third of studied nurses had poor working life quality and they dissatisfied with their own working life quality. This is consistent with the findings of this investigation. They reported that most of the studied nurses complained of the following items related to their occupation: accidents associated with workplace, lack of safety and discipline, unsuitable sanitary condition in workplace, insufficiency in periodic clinical tests, low monthly income and other financial rewards, occupational stresses, and unclear vision in their future.^[35] Shafipour *et al.* came to this conclusion that more than half of the studied nurses (66.1%) owned average level of working quality which is higher than the present study's results. This conclusion can be attributed to some factors such as low payment, insufficient safety in workplace and lack of discipline and supportive strategies in workplace.^[3] Almalki *et al.* reported low quality of working life in Saudi Arabia' hospitals due to unsuitable working time, lack of proper facilities, the inability in balancing the relation between occupational and familial duties, lack of holiday time for nurses, the existence of disqualified staff in workplace, inefficient management and observation systems, poor chances to improve professionally, unsuitable safety condition, and insufficient facilities to provide cares for patients. The researchers in the mentioned study concluded that their findings can be used by health managers and policy-makers to plan suitable programs to improve nurses' working life quality. This can assist to develop nurses' personal and organizational function and increase their commitment.^[46]

The findings of present study indicated that there was direct and significant relation between emotional intelligence with working life quality ($P \leq 0.05$). In other words, there is positive correlation between these variables in a way that more emotional intelligence leads to higher working life quality. There was direct and significant relation between interpersonal sensitivity with working life quality ($P \leq 0.05$). This correlation was negative so that high score of interpersonal sensitivity can be lead to reduce working life quality of nurses. Ghofrani Kelishami *et al.* stated that in their systematic research, emotional intelligence has positive consequences such as promoting self-esteem, socio-emotional success, and further satisfaction in life, increasing working life quality, and social commitment. Emotional intelligence in workplace can be lead to people's success through communicating with experts, faculty of members, staff and colleagues, improving problem-solving process, stress management, and anger management. This skill should be included in nursing education programs to achieve these goals.^[47]

Kim *et al.* found a positive correlation between emotional intelligence with occupational conflicts and professional satisfaction. In other words, high emotional intelligence resulted in reducing occupational conflicts and promoting professional satisfaction. In fact, nurses experience role conflicts in their career which is mostly related to their emotional intelligence. Hence, these conflicts should be reduced by sufficient programs in order to rise their occupational satisfaction. This can be affected by influencing nurse's emotional intelligence.^[23] Toyama and Mauno studied in Japan the relation between emotional intelligence with social support, work participation and creativity in nurses. The results showed positive relations among the mentioned variables. In addition, modifying and mediating analyses indicated that high emotional intelligence can be lead to improve positive relations among social support, work participation and creativity in nurses. They also found that emotional intelligence is a personal resource which its development causes creativity in workplace.^[22] Wedgeworth conducted an investigation in 2017 with regard to research the impact of interpersonal sensitivity and social support on life quality. He found that these variables were related to each other positively so that the role of social support, as a mediating factor between interpersonal sensitivity and life quality, is crystal clear. If social support is high, interpersonal sensitivity diminished and causes the person to respect others more. This can result in increasing life satisfaction and eventually, life quality.^[27]

The results of other investigations and this research have shown that achieving emotional intelligence and interpersonal sensitivity can promote working life quality through basic changes in nurses' viewpoints and attitudes towards patients themselves and their own career. Using these skills is a helpful approach for nurses, because they attain valuable awareness toward themselves, their colleagues and patients so that their attitudes about their own roles would be changed fundamentally.

Innovation in study

Previous conducted studies investigated emotional intelligence and working life quality independently or with other variables. Meanwhile, any study having been conducted interpersonal sensitivity has not been found in health field yet. The present investigation has researched this dimension in addition to emotional intelligence and also working life quality. Interpersonal sensitivity is considered as a very important factor in nurses work relations and working life quality. High sensitivity causes inefficiency, irritability, loneliness, failure in making interpersonal relations, suspiciousness toward colleagues and distrust among nurses. This cycle is repeated continuously and affects nurse's health and

also their emotional intelligence and working life quality. Therefore, the results of this investigation can be used to improve interpersonal relations, working life quality and also develop emotional intelligence.

Strong and weak points of study

The strong points of the present study were as follows; using three standard questionnaires simultaneously which made it possible to compare the findings of this investigation with other studies' results and having a novel approach adapted to the programs of healthy lifestyle. The weak points of this research encompasses excluding the participation of the nurses from private sector and those ones working in other places of the country.

Study limitations

The limitations of the present study include the following items: Since this investigation has been conducted in a small sample of nurses working in Tehran's governmental hospitals, the achieved results should be generalized to the similar populations with caution. Meanwhile, the findings of emotional intelligence, interpersonal sensitivity and nurses' working life quality employed in governmental hospitals are different from the whole society. Therefore, the generalization of the results to all hospitals of Tehran city and even the country has to be done cautiously.

Conclusion

The determination of working life quality is one of the major factors in the process of change and development in organizations. Today, improving professional satisfaction of staff including nurses of their own working life quality is one of the most obstacles against managers. Because, nurses with various beliefs and attitudes, experience different levels of satisfaction related to working life quality. This makes huge challenges in organizations. Besides, the quality and care levels of hospitals depends mostly on commitment, professional skills, working life quality, and nurses satisfaction rather than the existence of facilities and the situation of nonhuman resources. Therefore, the higher nurses have professional skills and working life quality, the more efficient practice and suitable nursing cares would be provided for patients. Emotional intelligence and interpersonal sensitivity are known as the nursing skills and have important roles in nurses' working life quality. Hence, based on their importance in nursing field, it is suggested that they are included routinely in all educational health materials. In addition, the nursing students should be given this chance to practice them through role playing, experimental and scientific techniques which are supposed to be creative and innovative. Emotional intelligence and interpersonal

sensitivity can be defined as the central part of nursing education, because making the nursing students sensitive to patients' feelings and beliefs leads to satisfy their needs. Consequently, these two elements should not be separated from nurses' professional practice in clinical nursing domain. To achieve these goals, the prerequisites of emotional intelligence and interpersonal sensitivity such as self-recognition, self-management, and social management have to be added to nursing education programs.

Acknowledgment

This article was derived from a research with 95-0-2-193-29050 number certified by The Deputy of Research and Technology of Iran University of Medical Sciences. Researchers would like to thank the nurses participating in this project and all people helping them to carry out it.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

- Nasiry Zarrin Ghabaee D, Talebpour Amiri F, Hosseini Velshkolaei SM, Rajabzadeh R. Quality of life and its relationship with job stress among nursing staff in hospitals of sari. *J Nurs Educ* 2016;5:40-8.
- Aryankhesal A, Niknam N, Hasani M, Mengelizadeh N, Aghaei N, Ghaedchukamei Z, et al. Determining the relationship between health literacy level and quality of life among the elderly living in nursing homes. *J Educ Health Promot* 2019;8:225.
- Shafipour V, Momeni B, Yazdani Charati J, Esmaeili R. Quality of working life and its related factors in critical care unit nurses. *J Mazandaran Univ Med Sci* 2016;26:117-26.
- Banidavoodi SH, Jafari L, Ali Chitgar E, Moghimzadeh Hendijani F. Examination of relationship between quality of work life and productivity in nurses of elected hospital in Ahvaz. *J Ethics Culture Nurs Midwifery* 2014;1:33-43.
- Koushki M, Akbari Sari A, Arab M, Ahmadi Engali K. Quality of working life and its relation with productivity of nurses' performance in Shahid Beheshti University of Medical Sciences. *Sci J Sch Public Health Institute Public Health Res* 2013;10:81-90.
- Mohammadi MA, Mozaffari N, Dadkhah N, Etebari Asl F, Etebari Asl Z. Study of work-related quality of life of nurses in Ardabil province hospitals. *J Health Care* 2017;19:108-116.
- Mahmoodian Ardakani Z, Bahrami MA, Montazeralfaraj R, Fallahzadeh H, Mohammadzadeh M. Relationship between mental health and quality of working life among clinical staff of selected hospitals of medical sciences Yazd. *Manag Strateg Health Syst* 2017;1:119-27.
- Navidian A, Saber S, Rezvani Amin M, Kianian T. Correlation of quality of work life and job satisfaction in nurses of Kerman University of Medical Sciences. *J Health Promot Manag* 2014;3:7-16.
- Hadian M, Raeissi P, Shali M, Khalilabad TH, Niknam N. Investigating the effects of human health resource changes on the basic health indicators in Iran: An econometric study. *J Educ Health Promot* 2019;8:207.
- Joslin LE, Davis CR, Dolan P, Clark EM. Quality of life and neck pain in nurses. *Int J Occup Med Environ Health* 2014;27:236-42.
- Mosadeghrad AM. Quality of working life: An antecedent to employee turnover intention. *Int J Health Policy Manag* 2013;1:43-50.
- Azarrang SH, Yaghmaei F, Shiri M. Correlation dimensions of quality of work life of nurses and demographic characteristics. *Iran J Nurs Res* 2013;7:18-24.
- Thompson P, Stanowski A. Maximizing nursing productivity the benefits of improved collaboration between nursing and support services. *Healthc Financ Manage* 2009;63:76-80, 82, 85.
- Mehdizadeh Firoozi MA, Safavi M, Esmaeilpour Zanjani S. Relationship between emotional intelligence and well-being among nurses of intensive care units in hospitals affiliated to Babol University of Medical Sciences. *J Manag Develop Health Res* 2017;1:55-60.
- Abolghasem Gorji H, Niknam N, Aghaei N, Yaghoubi T. An assessment of knowledge and attitude of Iranian nurses towards bioterrorism. *Iran Red Crescent Med J* 2017;19:e61036.
- Shams AA, Niknam N, Jabbari A, Hasan Zadeh A, Mengelizadeh N, Sartang Ayoub GH, et al. Assessment of safety management in different wards of AL Zahra hospital in Isfahan city in 2013. *J Health Manag Inform* 2014;1:81-5.
- Shams AA, Jabbari A, Niknam N, Hasanzadeh A, Mengelizadeh N, Mostafaie SH. The study of safety management in the hospitals affiliated to Isfahan University of Medical Science in 2013. *Int J Health Syst Dis Manag* 2014;2:180-5.
- Aryankhesal A, Hasani M, Niknam N, Safari M, Ranaei A, Kalteh EA. Staff perspectives on the relationship between knowledge management and social capital with organizational health in selected educational hospitals in Tehran. *J Educ Health Promot* 2020;9:29.
- Nemattavosi M. Job strain and affective well-being in the workplace. *Develop Psychol* 2010;6:215-25.
- Mayer JD, Salovey P, Curuso DR. Emotional intelligence as zeitgeist, as personality, and as a mental ability. In: Bar-On R, Parker JD, editors. *The Handbook of Emotional Intelligence: Theory, Development, Assessment, and Application at Home, School, and in the Workplace*. San Francisco, CA: Jossey-Bass; 2000. p. 92-117. Available from: [https://www.scirp.org/\(S\(i43dyn45teexjx455qlt3d2q\)\)/reference/ReferencesPapers.aspx?ReferenceID=1932649.4](https://www.scirp.org/(S(i43dyn45teexjx455qlt3d2q))/reference/ReferencesPapers.aspx?ReferenceID=1932649.4) [Last accessed on 2020 Sep 04].
- Benson G, Ploeg J, Brown B. A cross-sectional study of emotional intelligence in baccalaureate nursing students. *Nurse Educ Today* 2010;30:49-53.
- Toyama H, Mauno S. Associations of trait emotional intelligence with social support, work engagement, and creativity in Japanese eldercare nurses. *Japan Psychol Res* 2017;59:14-25.
- Kim J, Choi E, Lee H. Effect of nurses' role conflict and emotional intelligence on job satisfaction. *Adv Sci Technol Letters* 2016;122:170-4.
- Shahbazi S, Heidari M, Vanaki Z. Today nursing need for emotional intelligence: Integrative review of literature. *Quarterly J Nurs Manag* 2012;1:55-64.
- Vojudi B, Otared N, Poursharifi H. On the comparison of interpersonal sensitivity and assertiveness between drug-dependent persons and ordinary people. *Quarterly J Res Addict* 2014;8:109-18.
- Narimani M, Porzoor P, Basharpour S. Comparison of interpersonal sensitivity and emotional balance in students with and without specific learning disorder. *J Learning Disabil* 2015;5:142-8.
- Wedgeworth M. The role of interpersonal sensitivity, social support, and quality of life in rural older adults. *Geriatric Nurs* 2017;38:22-6.
- Masillo A, Valmaggia LR, Lanna A, Brandizzi M, Lindau JF, Curto M, et al. Interpersonal sensitivity and functioning impairment in youth at ultra-high risk for psychosis. *Europ Child Adolescent Psychiatry* 2016;25:7-16.

29. Wilhelm K, Boyce P, Brownhill S. The relationship between interpersonal sensitivity, anxiety disorders and major depression. *J Affect Disord* 2004;79:33-41.
30. Denollet J. Interpersonal sensitivity, social inhibition, and type D personality: How and when are they associated with health? Comment on Marin and Miller (2013). *Psychol Bull* 2013;139:991-7.
31. Mansouri B. Standardization of the Cyberia Shrink Emotional Intelligence Questionnaire in among Master's Students in Public University in Tehran, M. Sc. Thesis. Allameh Tabataba'i University, Tehran, Iran; 2001.
32. Ranjbar Ezzatabadi M, Bahrami MA, Hadizadeh F, Arab M, Nasiri S, Amiresmaili M, et al. Nurses' emotional intelligence impact on the quality of hospital services. *Iran Red Crescent Med J* 2012;14:758-63.
33. Kouchakzadeh Talami S, Namazi A, Alizadeh SH. The correlation between emotional intelligence and academic achievement on nursing and midwifery students. *Iran J Nurs* 2016;29:1-10.
34. Boyce P, Parker G. Development of a scale to measure interpersonal sensitivity. *Australian New Zealand J Psychiatry* 1989;23:341-51.
35. Dargahi H, Gharib M, Goodarzi M. Quality of work life in nursing employees of Tehran University of Medical Sciences hospitals. *J Hayat* 2007;13:13-21.
36. Ghaderi M, Shamsi A. The relationship between emotional intelligence and job involvement among hospitals nurses. *Quarterly J Nurs Manag* 2013;2:8-15.
37. Kouchakzadeh M, Sohrabi Z, Mosadeghrad AM. The relationship of emotional intelligence and its dimensions on communication skills among emergency unit nurses. *J Hospital* 2015;14:68-74.
38. Shahbazi S, Hazrati M, Moattari M, Heidari M. Training problem solving skills and its effect on emotional intelligence of nursing students of Shiraz. *Iran J Med Educ* 2012;12:67-76.
39. Basogul C, Ozgur G. Role of emotional intelligence in conflict management strategies of nurses. *Asian Nurs Res* 2016;10:228-33.
40. Rostami M, Movaghari MR, Taghavi T, Mehran A. The relationship between emotional intelligence and coping styles of nurses in hospitals in Kermanshah University of Medical Sciences. *Iran J Nurs Res* 2016;11:51-61.
41. Rushdy Mohamed F, Ramzy Yousef H. Emotional intelligence and conflict management styles among nurse managers at Assiut University Hospitals. *J Educ Practice* 2014;5:160-5.
42. Bakr M, Safaan S. Emotional intelligence: A key for nurses' performance. *J Am Sci* 2012;8:385-93.
43. Tajeri B. Effectiveness of problem-solving training on interpersonal sensitivity & aggression in students. *J Sch Psychol* 2016;5:39-55.
44. Hicdurmaz D, Oz F. Interpersonal sensitivity, coping ways and automatic thoughts of nursing students before and after a cognitive-behavioral group counseling program. *Nurse Educ Today* 2016;36:152-8.
45. Aydin A, Hicdurmaz D. Nursing and interpersonal sensitivity. *J Psychiatric Nurs* 2016;7:45-9.
46. Almalki MJ, Fitzgerald G, Clark M. Quality of work life among primary health care nurses in the Jazan region, Saudi Arabia: A cross-sectional study. *Hum Resour Health* 2012;10:30.
47. Ghofrani Kelishami F, Ashghaki Farahani M, Jamshidi Orak R, Arab Ameri Z, Bani Hashemi S, Seyedfatemi N. Emotional intelligence in nursing, models and methods of measurement. *Adv Nurs Midwifery* 2016;26:21-9.