Spiritual Intelligence as a Predictor of Work Engagement and

Quality of Work Life among Nurses

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Abstract

Background: Any organization's success is largely determined by how it recruits, motivates, and maintains its staff. As a result, organizations must implement a strategy that improves employees' quality of work life in order to meet both organizational and employee needs. When dealing with changes at work and boosting performance, employee engagement and spiritual intelligence are crucial aspects to consider. **Aim**: to assess the relationship between spiritual intelligence, work engagement and the quality of work life among nurses at Zagazig University Hospitals**. Study design**: The researchers utilized a descriptive correlational study design. The study took place at Zagazig University Hospitals (Academic Hospitals), Egypt. **Study subjects:** A stratified random sample was used and 384 nurses were chosen from the above mentioned setting. **Tools of data collection:** The data was gathered utilizing a four-part questionnaire sheet for staff nurses: Personal characteristics, spiritual intelligence self-assessment questionnaire, Utrecht Work Engagement Scale (UWES), and quality of work life survey. **Results**: revealed that 74.5% of staff nurses have moderate quality of work life, while 95.3% and 82.6% of them had high spiritual intelligence and work engagement respectively with all domains. **Conclusion**: Spiritual intelligence was a good predictor of nurses' work engagement and quality of work life, with a statistically significant difference between all spiritual intelligence dimensions, work engagement, and quality of work life. **Recommendation:** It is suggested that a fair reward system be developed that includes both financial and non-financial rewards, as well as reducing feelings of nervousness, strain, frustration, and stress at work in order to improve the perceived quality of work life and enhance nurses' spiritual intelligence by encouraging them to participate in problem solving and decision-making, as well as providing adequate help and support.

Keywords: Spiritual intelligence – Work engagement–Quality of work life-Nursing staff

Introduction

Changes at work and boosting performance, spirituality, engagement, and quality of work life are crucial issues to consider (Vancea, 2018)**.** Spiritual Intelligence has become critical for the success of any organization in the modern era. Spiritual intelligence is the expression of an individual's natural spiritual traits through their attitudes, behaviors and thoughts (Safara & Bhatia, 2020).

Spiritual intelligence assists us in resolving problems of significance and values; intelligence that enables us to set our activities and lives in a far broader, richer, and meaning-giving framework; intelligence that enables us to assess why one life path is more significant than another. The fulfilment of a human being's inherent needs to feel that everything has a meaning, a purpose was termed as spiritual intelligence (Zohar & Marshall, 2016).

Bosch (2019) distinguishes between two sorts of spirituality: pure and applied. Pure spirituality is the inner experience of pure self-awareness that is silent, limitless, and inner. It lacks the usual content of observation, ideas, and emotions. Applied spirituality, on the other hand, refers to the field of practical applications and measurable consequences that emerge naturally from the inner experience of pure spirituality.

Nurses face a variety of stressors at work, including overwork, shift work, and ambiguity in authority, all of which impair the quality of their healthcare. As a result, dealing with day-to-day job problems is essential (Mohsenimaram et al, 2017). Spiritual intelligence helps nurses deal with stressful situations, grasp the meaning of life, and manage value dilemmas, all of which improves the quality of their work lives. Spiritual activities such as yoga, meditation, and prayer, on the other hand, have long been recognized as

beneficial to one's mind, body, and spirit (Miri et al, 2018)·

The extent to which an employee's personal and working requirements are met while participating in the workplace and attaining the organization's goals is referred to as quality of work life (QWL). The value of QWL in reducing staff turnover and improving employee well-being, which has an impact on the services provided (Swamu, 2020). It is necessary to improve the status of QWL in employees by implementing QWL effectively, such as flexible time, job enrichment, job enlargement, and autonomous workgroup culture. These interventions ensure that a worker's full potential is realized by ensuring increased involvement, which improves the work's effectiveness and efficiency by enhancing the QWL. They also create opportunities for employees to actively participate in the decision-making process (Miri et al, 2018).

Job satisfaction can be considerably improved by employees' assessments of the quality of work life that can meet their needs. Furthermore, a higher level of job satisfaction will result in people being more engaged at work (Park & Gursoy, 2019). Nurse engagement is defined as deliberately devoting intellectual effort, experiencing favorable emotions, and making meaningful connections with people while performing work. Thus, an engaged employee is one who thinks

deeply about his or her work, feels good when he or she does a good job, and discusses and solves work-related challenges with others around him or her (Vas, 2017).

Furthermore, nurse engagement is defined as "a good, rewarding, work-related frame of mind marked by vigor, dedication, and absorption." (Kim et al, 2019). Employee engagement has been found to have a substantial and positive association with income growth, stock price, individual job performance, and an organization's overall financial performance in studies (Mirvis, 2017). That is, engaged personnel are more likely to be active and enthusiastic about their work, as well as to be deeply dedicated to it (Macy, 2016).

Significance of the study:

Any organization's aims are success, growth, and progress. Human resources are the most significant factors in achieving these objectives. Employees that are highly fulfilled, satisfied, and engaged, as well as innovative, dedicated, and creative, are required if the organization is to achieve its objectives efficiently and successfully. Nurses must be proactive, show initiative while engaged in their profession, and remain committed to performing at high standards to survive in today's challenging world.

Nurses who are spiritually intelligent are actively involved in their jobs, which allows them to enlighten and guide future workplace reforms and policies that benefit their businesses. So the aim of this study was to assess the relation between spiritual intelligence, work engagement, and quality of work life among nurses at Zagazig University Hospitals.

Aim of the study:

The present study was conducted to assess the relationship between spiritual intelligence, work engagement, and quality of work life among nurses at Zagazig University Hospitals.

Through:

1. What is the level of nurses' spiritual intelligence?
2. What is the level of nurses' work engagement?
3. What is the level of nurses' quality of work life?
4. What is the relationship between nurses' spiritual intelligence and work engagement?
5. What is the relationship between nurses' spiritual intelligence and quality of work life?
6. Is spiritual intelligence predictor to work engagement?
7. Is spiritual intelligence predictor to quality of work life?

Subjects and methods:

Research design:

A descriptive correlational study design was used.

Study setting:

This research was carried out at all of Zagazig University Hospitals (Academic Hospitals), Egypt, which are divided into two sectors, each with eight teaching hospitals. New Surgical Hospital (600 beds), Emergency Hospital (185 beds), Delivery and Premature Hospital (57 beds), and General Medicine Hospital comprised the emergency sector (322 beds). The second sector, El-Salam, consists of four hospitals, three of which provide free care: Cardio Thoracic Hospital (212 beds), Pediatric Hospital (220 beds), and El-Salam Hospital (254 beds), and the fourth, El-Sadat Hospital, which provides economic therapy (104 beds). There are a total of 1954 beds available. Both sectors provide inpatient and outpatient services with total number of 2446 nurses.

Subjects:

It was decided to employ a stratified random sample. The required number of nurses for each hospital was estimated using the formula (number of nurses in each hospital × required sample size / total number of nurses in all hospitals). New-Surgical Hospital (83 nurses), Internal-Medicine Hospital (75 nurses), Emergency Hospital (38 nurses), Delivery and Premature Hospital (23 nurses), Cardiac and Chest Hospital (63 nurses), El-Salam Hospital (47 nurses), El-Sadat Hospital (24 nurses), and Pediatric

Hospital (31 nurses). 384 nurses were chosen.

Sample size:

The appropriate sample size was calculated using the method $[[X^2 NP (1- P) / d^2 (N -1) + X^2 P (1- P)]$ (11)] with a confidence interval of 95 %, a margin of errors of 5.0 %, and a total population of 2446 nurses. (11); the sample size required was 384 nurses who met the following criteria for inclusion: At least one year of experience is required, as well as the willingness to engage in the research.

Tools of data collection:

A questionnaire sheet used to collect data for this study and composed of four parts:

Part 1: Personal characteristics such as age, marital status, educational level and previous work experience of nurses.

Part 2: Self-assessment questionnaire of spiritual intelligence. The measurement scale of spiritual intelligence was adapted from the scale of Spiritual Intelligence Self-Report Inventory (SISRI-24) by **King (2008)** with 24 items which contains four dimensions, critical existential thinking (CET) contains 7 items, personal meaning production (PMP) contains 5 items, transcendental awareness (TA) contains 7 items, and conscious state expansion (CSE) contains 5 items. The item number 6

is reversed score. The measurement of the scale consists of 5-point Rating-type scale, with responses ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Higher scores signify higher levels of spiritual intelligence. The reliability of the tool was tested using the internal consistency method. Cronbach's alpha coefficient for the tool was .853**.**

❖ **Scoring system:**

Scores from 65 to 96 % indicated high level, between 40 to 64 indicated moderate levels, and 0 to 39 indicated low spiritual intelligence level (King, 2008).

Part 3: The Utrecht Work Engagement Scale (UWES): Developed by Schaufeli et al (2010), it was utilized to assess work engagement level among nurses at hospitals. This 17- item questionnaire is measured on a seven-point frequency scale, ranging from 0 (never) to 6 (always); the measure has three sub-scales: "vigor" (6 items), "absorption" (6 items), and "dedication" (5 items). The reliability of the tool was tested using the internal consistency method. Cronbach's alpha coefficients for nurses were .871**.**

❖ **Scoring system:**

The scores of the items were summed up and the total divided by the number of the items, giving a mean score for the part. These scores were converted into a percent score. The domain was considered to be high if the percent score was 60% or more, and low if less than 60% (Schaufeli et al, 2010).

Part 4: Quality of Nurses Work Life (QNWL) was developed by Brooks (2018) to measure quality of work life among nurses which contains 42 items in the following four subscales :(a) work life/home life, which contains 7 items (b) Work design, which contains 10 items (c) work context dimension, which contain 20 items and (d) work world dimension, which contains 5items. The reliability of the tool was tested using the internal consistency method. Cronbach's alpha coefficients for nurses were .800.

❖ **Scoring system:**

The study subjects are asked to respond on a 5- point Likert scale with 1 denoting strongly disagree and 5 denoting strongly agree. The maximum score was (210) and minimum (42), the score of items were summed up and the total divided by number of the items, giving a mean score of the part. These scores converted into a percent score were classified as follows:

- Score < 50% referred to low quality of work life,
- Score from 50 - < 75% referred to moderate quality of work life,
- Score from 75 ≤ 100% referred to high quality of work life (Brooks, 2018)

Content validity:

After the instrument was translated into Arabic, data was collected using a self-administered questionnaire. A jury of experts (5 professors and assistant professors) from academic nursing staff at Zagazig and Ain-Shams universities determined the content and face validity. All essential revisions were made, according to their opinions.

Pilot study:

A pilot study was conducted on 38 nurses (10 % of the study population) to ensure that the tools were clear and to estimate the time required for each participant to complete the questionnaire sheets. The required changes were made, and the people who took part in the pilot study were excluded in the main study sample.

Field work:

Data was collected during morning and afternoon shifts for four months, from the beginning of October 2020 to the end of January 2021. The nurses were informed on the study's purpose as part of the preparation process. The time it took to complete each questionnaire sheet varied between 25 and 40 minutes.

Administrative and ethical considerations:

After describing the study's purpose to the medical and nursing directors of the hospitals, as well as the head nurses of the units, permission to perform it was granted. The participants were advised that their participation in the study was fully voluntary, and the study's cover letter addressed the participants' confidentiality. The completion of the questionnaires established with consent.

Statistical analysis:

The Statistical Package for Social Science (SPSS) version 17.0 was used for data entry and statistical analysis. Data was checked to ensure that there was no missing or unusual information. For categorical variables, descriptive statistics in the form of frequencies and percentages were used, whereas for continuous variables, means and standard deviations were used. The inter-relationships between total scale scores were assessed using Pearson correlation analysis. The factors of nurse work engagement and quality of work life were discovered using multiple regression analysis. A p-value of less than 0.05 was judged statistically significant. Linear regression test also was used to assess prediction between independent variable and dependent variables.

Results:

Table (1): Indicates personal and job characteristics of staff nurses. According to the table 43.5% of nurses' age ranged between 30- <40 years, with a mean age of 1.98+752.

Regarding marital status, 82.3% of nurses were married, 57% of them have technical diploma in nursing, and 68.5% of nurses have less than 10 years of experience.

Table (2): shows frequency of quality of work life**,** spiritual intelligence and work engagement dimension levels among the staff nurses. As shown in the table, quality of work life was moderate with the items related to work design and work frame (63.8%& 62% respectively), while work life/home life and work scope of life were high (100% & 49.7% respectively). Regarding spiritual intelligence the table indicates that staff nurses have high spiritual intelligence with all item related to spiritual intelligence (critical existential thinking (CET), personal meaning production (PMP), transcendental awareness (TA), and conscious state expansion (CSE) (**79.7,** 95.6, 90.4 & 92.7 respectively) As well, the table indicates that the staff nurses have high work engagement with all items (vigor, dedication and absorption), (76.8, 79.7& 82.0 respectively).

Table (3): Displays correlations matrix between spiritual intelligence , work engagement and quality of work life, among nurses, According to the table, there were highly statistically positive correlation between all dimensions of spiritual intelligence, work engagement and quality of work life except between work design and absorption were negative correlation (p <_0.05)

Table (4): Shows correlations between spiritual intelligence, work engagement and total quality of work life scores among nurses, According to the table, there were highly statistically positive correlation between all dimensions of work engagement, spiritual intelligence and quality of work life (p <_0.05).

Table (5): Indicates the regression analysis to study independent factor affecting nurses' work engagement, and it shows that after adjustment of all factors, results revealed that spiritual intelligence is independent factor affecting and predicting nurses' work engagement score; as increase in spiritual intelligence scores is associated with an increase in nurses' work engagement score (regression coefficient = 0.577, P < 0.01, (in response to research question 6).

Table (6): Indicates the regression analysis to study independent factor affecting nurses' quality of work life, and it shows that after adjustment of all factors, results revealed that spiritual intelligence is independent factor affecting and predicting nurses' quality of work life score; as increase in spiritual intelligence scores is associated with an increase in nurses' quality of work life score (regression coefficient = 0.705, P < 0.01, (in response to research question 7).

Table (7): presents relation between quality of work life, spiritual

intelligence, and work engagement and personal characteristics of nurses. According to the table, nurses' age had highly statistically significant influence on quality of work life, spiritual intelligence and work engagement (p=0.000). In addition, marital status and experience had highly statistically significant influences on quality of work life and work engagement (p=0.000). Education had statistically significant influences on quality of work life and spiritual intelligence (p=0.000).

Table (1): Personal Characteristics of Studied Nurses (n=384).

Personal characteristics	No	%
Age		
• <30	112	29.2
• 30 - <40	167	43.5
• +40	105	27.3
Mean± SD	1.98 ±.752	
Marital status:		
• Single	62	16.1
• Married	316	82.3
• Widow	6	1.6
Education		
• Diploma	85	22.1
• Technical institute	219	57.0
• B.Sc.	80	20.8
Experience		
• <10	263	68.5
• 10-20	120	31.3
• >20	1	.3
Mean± SD	1.32±.472	

Table (2): Frequency of Spiritual Intelligence, Work Engagement and Quality of Work Life Dimension Levels among Studied Nurses (n= 384).

Study Variables	Low		Moderate		High		Mean	SD
	No	%	No	%	No	%		
Quality of work life:	-	-	-	-	384	100	23.0938	2.59374
• Work life /home-life								
• Work design	-	-	245	63.8	139	36.2	35.5469	4.09647
• Work frame	-	-	238	62.	146	38	75.9740	10.60639
• Work scope of life	33	8.6	160	41.7	191	49.7	18.70	4.054
Total mean scores percent	**-**	**-**	**286**	**74.5**	**98**	**25.5**	**153.3177**	**14.81295**
Spiritual intelligence:	-	-	78	2.3	306	79.7	23.4609	3.68591
• Critical existential thinking (CET)								
• Personal meaning production (PMP)	-	-	17	4.4	367	95.6	17.4453	2.31289
• Transcendental awareness (TA	-	-	37	9.6	347	90.4	24.2969	3.52912
• Conscious state expansion (CSE)	-	-	28	7.3	356	92.7	16.9115	2.28343
Total mean scores percent	**-**	**-**	**18**	**4.7**	**366**	**95.3**	**82.1146**	**10.39745**
Work engagement:	89	23.2	-	-	295	76.8	23.0677	4.09363
• Vigor								
• Dedication	78	20.3	-	-	306	79.7	19.9297	2.99220
• Absorption	69	18	-	-	315	82	22.8568	2.82063
Total mean scores percent	**67**	**17.4**	**-**	**-**	**317**	**82.6**	**65.8542**	**8.67574**

Table (3): Correlation matrix between Spiritual Intelligence, Work Engagement and Quality of Work Life Domains among Studied Nurses (n=384).

quality of work life	Spearman rank correlation Spiritual Intelligence				Work Engagement		
	Critical existential thinking (CET)	Personal meaning production (PMP)	Transcendental awareness (TA)	Conscious state expansion (CSE)	Vigor	sorption	edication
Work life /home-life	.581**	0.006	.454**	.415**	98**	.464**	17**
Work design	0.027	0.023	.149**	0.055	0.023	-.247**	85**
Work frame	.610**	.166**	.490**	.562**	60**	.363**	04**
Work scope of life	.724**	.690**	.696**	.642**	07**	.265**	87**

(*) statistically significant a P<0.05   (**) Statistically significant at P<0.01

Table (4): Correlation between Total Scores of Spiritual Intelligence, Work Engagement and Quality of Work Life among Studied Nurses (n=384).

Study Variables	Spearman rank correlation					
	Quality of work life		Spiritual intelligence		Work engagement	
	r	P	r	P	R	P
Quality of work life			.70	0.000**	.556	0.000**
Spiritual intelligence	.705	0.000**			.577	0.000**
Work engagement	.556	0.000**	.577	0.000**		

*) Statistically significant at P<0.01   (*P<0.05 (*) statistically significant at

Table (5): Regression Analysis to Study Independent Factor Affecting Nurses' Work Engagement (n=384).

Independent factor	Regression Coefficients	P- Value	Sig.	5% CI Regression Coefficients	
Spiritual intelligence	0.577	0.000**	HS	0.413	0.550

*Significant at p < 0.05

Table (6): Regression Analysis to Study Independent Factor Affecting Nurses' Quality of Work Life (n=384).

Independent factor	Regression Coefficients	P- Value	Sig.	5% CI Regression Coefficients	
Spiritual intelligence	0.705	0.000**	HS	0.902	1.106

*Significant at p < 0.05

Table (7): Relation between Spiritual Intelligence, Work Engagement, Quality of Work life and Personal Characteristics of Studied Nurses. (n=384).

Personal Characteristics	Chi square test								
	quality of work life			Spiritual intelligence			work engagement		
	x^2	SD	P-Value	x^2	SD	P-Value	x^2	SD	P-Value
Age									
• <30									
• 30 - <40	2.312	.4656	0.000**	2.991	.0944	0.000**	2.178	.9883	0.000**
• 40+	2.377	.4861		3.000	.0000		2.976	.2182	
	2.000	.0000		2.838	.3701		2.638	.7736	
Marital status									
• Single	2.000	.0000	0.000**	2.983	.1270	0.378	1.580	.9152	0.000**
• Married	2.294	.4564		2.940	.2259		2.854	.5203	
• Widow	2.833	.4082		3.000	.0000		3.000	.0000	
Experience									
• <10	2.372	.4844	0.004**	2.996	.0616	0.209	2.627	.7802	0.000**
• 10-20	2.000	.0000		2.858	.3501		2.700	.7171	
Education									
• Diploma	2.270	.4469	0.000**	2.988	.1084	0.000**	1.964	1.005	0.617
• Technical institute	2.301	.4599		2.940	.2368		2.844	.5363	
• B.sc	2.112	.3179		2.950	.2193		2.850	.5301	

(*) statistically significant at P<0.05   (**) Statistically significant at P<0.001

Discussion:

Spiritual intelligence (SI) is one of the most effective variables in increasing the quality of nursing services and can play a critical role in the protection of patients' rights since it allows nurses to deal with stressful situations (Mosadeghrad, 2019) . In addition, the quality of work life is a measure of nurses' satisfaction with the extent to which significant individual needs and organizational demands are addressed(Mohammadi,2017;Hanlon&Gladstein,2020).

Spiritual Intelligence also enables us to consider issues of purpose and worth. So that one's life and activities might be placed in a more meaningful, richer context. In order to determine whether one life path is more meaningful than another. Developing and fostering SI in employees allows businesses to more effectively engage them and create positive results (Clarke & Brooks, 2010; Schalk et al, 2016).

The aim of this was conducted to assess the relationship between spiritual intelligence, work engagement, and quality of work life among nurses at Zagazig University Hospitals.

The findings of the present study indicated that quarter of staff nurses were moderately satisfied with their quality of work life, the major influencing factors were work design and work frame, while work life/home life and work scope of life were highly satisfied with their QWL. This mean that the hospital was providing a secure environment and the salary was adequate for them. Meanwhile work

design and work-frame were moderate due to that team work was not present, adding to poor communication, inadequate supervision and heavy workload that lead to poor job satisfaction.

These results were congruent with that of a study conducted in Tehran by Nayeri et al (2019) who reported in their findings that QWL was at a moderate level. In the same line the result of George (2018) who carried out a survey among 67 nursing faculties about their perceptions and attitudes towards quality of work-life and showed that majority of staff, (86.57%) experienced well balanced work-life, in addition El- Sayed and Abdel- Aleem (2014) who conducted a study on quality of work life and horizontal violence among staff nurses in Port -Said City, detected in their findings that 99.2% of staff nurses have high quality of work life. However a similar studies finding by Almalki et al (2019) were incongruent with the previous studies findings, where the respondents were dissatisfied with their work life. As well, a very recent study done by El-shahat et al (2018) on the relationship between quality of work life and turnover intention among staff nurses, revealed that the highest percentage of studied nurses had low agreement regarding total quality of work life.

According to Zohar and Marshall (2016) spiritual intelligence is the intelligence that helps us approach and solves the problems related to significance and values. Spiritually, intelligent employees are well engaged with their workplaces, which help them to enlighten and guide future workplace reforms and policies that bring about positive results to organizations.

Regarding spiritual intelligence, results indicated that staff nurses' spiritual intelligence was high with all items (critical existential thinking (CET), personal meaning production (PMP), transcendental awareness (TA) and conscious state expansion (CSE) As well, the table indicates that the staff nurses' work engagement was high with all items (vigor, dedication and absorption). These findings might be due to that the individuals who have high spiritual intelligence they are more satisfied with their job and showed higher performance and high work engagement. These results are supported with those of Torabi and Javadi (2018) which indicated in their study findings that nurses as job engagement and spiritual intelligence were of the above average.

As suggested by a previous research had done by Schaufeli et al (2010) the high energetic (emotional–intellectual) motivational state implicit in individuals' work engagement. In this respect, Zohar and Marshall (2016) in their research proved that people who have high spiritual intelligence, they showed intellectual and correct behaviour, while people who have low spiritual intelligence, and they showed problematic behaviour.

Concerning correlation matrix between quality of work life, spiritual intelligence and work engagement domain, the present study results indicated that there were statistically significant differences between all dimensions of work engagement and spiritual intelligence except between personal meaning production (PMP) and for absorption, there was a negative correlation, also there were statistically significant differences between all dimensions of spiritual intelligence and

quality of work life except for work design. Additionally, the finding indicated that there were statistically significant differences between all dimensions of work engagement and quality of work life except between vigor and work design dimension, where it was a negative one.

These results were supported by Roof (2019) who studied "the association of individual spirituality on employee engagement "her results showed significant relationships between individual spirituality and engagement, vigor, and dedication, except for the engagement dimension of absorption.

Previously, Torabi and Javadi (2018) studied the relationship between spiritual intelligence and job engagement. Their findings showed that there was a significant link between three dimensions of spiritual intelligence (personal meaning production, conscious state expansion and critical existential thinking), and job engagement, while there was no significant relation between transcendental awareness and job engagement. The overall result of their study showed that spiritual intelligence has a significant and positive impact on the job engagement.

Regarding correlation between spiritual intelligence, work engagement and quality of work life scores among nurses, the current study findings indicated that, there was statistically significant correlation between spiritual intelligence and work engagement. This matches regression analysis where spiritual intelligence was found to be good predictor of nurses' work engagement. This might be due to Spirituality leads to engagement of hearts and minds of their employees towards the

workplace. It has an impact over job attitudes and behavior because of its potential to promote and create high levels of employee engagement. It generates positive, fulfilling work related state of mind that is characterized by vigor, dedication and absorption towards workplace.

In agreement with, Snyder et al (2017) mentioned that employees have a stronger sense of spirituality were enabled to exercise stronger values and ethical beliefs in their workplace and empower them to show more creativity and flexibility at work. In the same line, Gull and Doh (2018) has reviewed that spiritual consciousness makes employees to be more engaged and can work more responsibly, ethically, collaboratively and creatively when they find meaning in their work activities. In the same direction, Devi (2018) carried out a study in India to explore and establish a relationship between spirituality, emotional intelligence and employee engagement and found that regression analysis of spirituality and employee engagement shows enhancement in overall employee engagement is due to the spirituality. The impact of spiritual intelligence on employee engagement is strong and significant.

As well, the study findings concluded that there was statistically significant correlation between spiritual intelligence and quality of work life. This goes in line with regression analysis where spiritual intelligence was found to be good predictor of nurses' quality of work life. This might be due to spiritual intelligence prepares nurses to deal with stressful situations and problems. Nurses encounter a number of stresses at work such as overwork, shift work, and ambiguity in the level of authority which,

in turn, reduces the quality of their care. As a result, coping with daily work problems is very important. Spiritual intelligence is used to understand the meaning of life and to solve value problems.

This finding is matching with that of Mohsenimaram et al (2018) who conducted a study in Iran and showed that there was a direct relation between spiritual intelligence and the quality of work life and the quality of work life has been increased with increasing spiritual intelligence in nurses. As well, Ahmadi et al (2019) mentioned that there was a positive relationship between spiritual intelligence (critical thinking, creating personal meaning, transcendental awareness and expanded consciousness) and quality of work life.

Concerning correlations between quality of work life, spiritual intelligence, and work engagement scores and personal characteristics of nurses, this study results indicated that nurses' age had statistically significant influences on quality of work life, spiritual intelligence and work engagement (p<0.001). In addition, marital status and experience had statistically significant influences on quality of work life and work engagement. (p<0.001).

Recommendation

Based on the results of the main study findings, the following recommendations are suggested:
▪ Organizations can assist employees in achieving work-life balance through wellness programs, practicing yoga, meditation, flexible work schedules, reduce time spent on job-related travel, restructuring and to enhance the spirit of employees.

Education had statistically significant influences on quality of work life and spiritual intelligence. These results were congruent with the findings of Price and Mueller (2016) who found that less experienced nurses tend to be younger, participate less in decision making, which might lower their perception of QWL. Regarding marital status, the results of Al-Enezi et al (2020) indicated that single nurses were found to have significantly lower mean score of QWL than other peers.

Conclusion:

In the light of the main study findings, it can be concluded that, staff nurses have high spiritual intelligence and work engagement levels, while, moderate level of quality of work life, and the differences were significant among all dimensions of work engagement, spiritual intelligence and quality of work life. Therefore, with increasing levels of spiritual intelligence in nurses, the quality of their work life and work engagement was increased. As well, it can be concluded that, spiritual intelligence was good predictor of nurses' work engagement and quality of work life.

▪ The organization should work towards reducing the feeling of nervousness, strain, frustration, and stress at work for augmenting the perceived quality of work life and enhancing employees' spiritual intelligence.
▪ Jobs should be designed in ways that provide meaning, motivation, and opportunities for nurses to use their skills and abilities.

- Nursing administration should provide motivators or energizers which positively affect work engagement such as, social support from co-workers and one's superior, performance feedback, coaching, job autonomy, task variety, and training facilities.
- Nursing management should encourage the employees to share

problems, and provide adequate help and support.

Further research:

- Multi-disciplinary interventions to improve nurses' quality of work life need to be developed, implemented, and their effectiveness assessed.

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