Head Nurses' Emotional Intelligence and its Effect on their Job Satisfaction in a Military Hospital

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Abstract

Background: The relationship between emotional intelligence and job satisfaction has gained the attention of researchers as it is reported that emotional intelligence plays a pivotal role in predicting job satisfaction among employees. **Aim:** This study aimed to assess effect of head nurses 'emotional intelligence on their job satisfaction in a military hospital. **Subjects and methods: Research design:** A descriptive cross-sectional design was used to carry out this study**. Setting:** The study was conducted at El-Galaa hospital. **Subject:** A convenience sample included 69 head nurses. **Tools:** Data was collected by using, Bar-On Emotional Quotient Inventory-Short and Job satisfaction scale. **Results:** In the present study, showed that more than half of participants had moderate level of emotional intelligence and have high level of satisfaction **Conclusion** There was strong positive linear correlation between head nurses job and their emotional intelligence (r=0.839, p<0.001). While There was weak negative insignificant correlation between Total satisfaction domains and emotional domains (r=-0.02, p=0.872). **Recommendations:** Managers should build a team work spirit as well as keeping a positive work climate. Educational programs should be done about the emotional intelligences of the head nurses and hospital administrators should ensure job satisfaction among nurses through implementing different techniques to meet their needs.

Keywords: Head Nurses, Emotional Intelligence, Job Satisfaction.

Introduction

The most rewarding, difficult, and emotionally taxing vocation is nursing. Every nurse handles difficult and emotional situations in her clinical life in a unique way. Few of them have effective coping mechanisms; instead, many of them rely on taught behavior to keep their composure. In a nurse's line of work, conflict and crises are commonplace. Because of this, it necessitates more emotional maturity and professional accountability, both of which are based on emotional intelligence [(1)].

The main objective of any profitable organization should be to make a profit. This objective can only be achieved by increasing the employees' performance, which is subsequently related to emotional intelligence (EI) and job satisfaction. The studies on the relationship between EI and job satisfaction are becoming prevalent in the academic literature [(2)].

Nursing is a health care profession, which is focused on the care of individuals, families and communities; so that they can attain, maintain or recover optimum health. Nurses care for individual of all ages and cultural backgrounds who are healthy and ill in a holistic manner based on the individual's physical, emotional, psychological, intellectual, social and spiritual needs [(3)].

Emotional intelligence (EI) is the capacity, skill, ability or in the case of the trait emotional intelligence model it is a self-perceived ability which helps in order to control, access and identify the individual emotions, of others and of different groups [(3)].

Emotional intelligence is important to consider the effects of managing up, which refers to the good and positive relationship between the employee and his/her supervisor. Previous research found that quality of this relationship could interfere in the results of the subjective rating of job performance evaluation. Emotional

intelligent supervisors devote more of their working time on managing their relationship with employee's supervisors [4].

Job satisfaction related to beliefs and emotions that individuals have about their work and their job. It has been described as an attitude with an affective and cognitive component. When establishing the level of job satisfaction, the researchers should focus on how employees feel about their work and personal relationships in the workplace, and on how leaders influence employees' satisfaction. Without a doubt, satisfied employees are the ultimate goal of every leader. On the other hand, the goal of every employee is to find the kind of work that matches his abilities and interests as closely as possible, enables him success, and provides him with opportunities for promotion. Satisfied employees tend to be more productive and committed to their employers [5].

It is generally considered that emotional intelligence will influence employees' job satisfaction. This is because the employees with higher emotional intelligence are able to develop strategies to overcome the possible consequences which may arise out of stress whereas those with less emotional intelligence won't be in a position to overcome the stress situations. In addition, in a group setting employees with higher EI will be able to influence the emotions of others in such a manner that, they will be able to boost their own as well as their coworkers' morale. The relationship between emotional intelligence and job satisfaction has gained the attention of researchers as it is reported that emotional intelligence plays a pivotal role in predicting job satisfaction among employees [2].

Studies concluded that EI has been playing vital role in today's working environment. The philosophy of EI assists in analyzing employee's attitude, styles of management, interpersonal capabilities and job satisfaction. It testifies a significant relevance in head nurses practices like selection and recruitment, planning and profiling. The most important advantage of EI is that it helps the employees to comprehend and manage sentiments [6].

It also provides an area to a person to become handy of his own conduct as well as associations with the people around. Psychological research revealed that,

comprehending and managing emotions play important and pivotal role in rewarding person's everyday life and work setting Rashad et al. [6]. Therefore the present study aiming to assess the level of emotional intelligence of head nurses and its relationship to the level of job satisfaction of staff nurses in order to spot light on areas which could be developed in emotional intelligence of the head nurses to improve the level of job satisfaction of staff nurses, quality of performance and to achieve the hospital goals.

Aim of the Study

This study aimed to assess effect of head nurses 'emotional intelligence on their job satisfaction in a military hospital:

Objectives:

- To assess the level of emotional intelligence among head nurses in military hospital.
- To assess level of job satisfaction among head nurses in military hospital.
- To find out the relation between head nurses' emotional intelligence and their job satisfaction.

Research questions:

- What is the level of emotional intelligence among head nurses in military hospital?
- What is the level of job satisfaction among head nurses and the relation with their emotional intelligence?

Subjects and Methods

Research *Design:*

*A descriptive cro*ss-sectional design was used to carry out this study.

Setting of the study:

This study was conducted in El-Galaa military hospital departments. The hospital provides inpatient and outpatient services to military personnel and their families. The study was conducted in 3 pediatric intensive care units, 1 incubatory unit, 12 adult intensive care units and 30 internal departments of one military hospital.

Subject of the study:

A convenient sample included all available head nurses (No=69 head nurse) who working at aforementioned setting.

Inclusion criteria:

Head nurses who have worked in the departments for at least one year and accept to participate at this study.

Tools of data collection

Two tools were used to collect data for this study namely, Bar-On Emotional Quotient Inventory-Short and Job satisfaction scale

First Tool: Bar-On Emotional Quotient Inventory-Short

This tool aimed to assess the level of emotional intelligence among head nurses in military hospital. It includes two parts:

Part 1: Aimed at collecting data regarding personal and work characteristics of the study subjects such as name, gender, age, marital status, educational level, previous attendance of training courses, and years of work experience.

Part 2: This part was developed by **Bar-On** [7]. It is categorized into 51 items distributed across 5 domains as the following.

Table (1): Description of Emotional Intelligence Quotient Inventory-Short.

Domains	Numbers of items	Example
Intrapersonal domain	11 items	It's hard for me to describe my feelings
Interpersonal domain	9 items	I care what happens to other people and I'm sensitive to the feelings of others.
Adaptability	11 items	I try to see things as they really are, without fantasizing or day dreaming about them.
Stress management	8 items	I believe that I can stay on top of tough situations.
General mood	12 items	I've got a bad temper

Scoring system:

Head nurses' responses were measured on a five-point likert scale ranging from (very seldom or not true for me) to (very often true for me or true for me). They scored 1 to 5 respectively. For each dimension the scores of items were summed up and the total score will be divided by number of the items, giving the mean score for the part. The scores were converted into a percentage score. Emotional intelligence was considered high if the percentage score is more than 75%, moderate level if the participant had a total score ranging from 60 to 75%, and low level if the participant had a total score less than 60% . [8]

Second Tool: Job satisfaction scale:

This tool aims at assessing the level of job satisfaction among subjects. It is based on the scale proposed by **Tappen et al.** [9] which is also guided by Herzberg hygiene-motivation factors theory [10]. The scale was Modified and translated into Arabic language using Webster's dictionary as required. It included 70 items which are grouped under 7 domains divided to 4 domains for (hygienic) factors, and 3 domains for (motivating) factors as shown in the following table.

Table (2): Job satisfaction scale domains

Domains	Number of Items	Example
Hygiene factors		
1-Adequate salary	7	My pay cover my living expenses
2-Appropriate administration	11	Administration determine my role in work
3-Interpersonal relations	6	There is a good competition with peers
4-Work conditions	14	Management precautions enough to prevent exposure to infection during work
Motivating factors		
5-Work itself	7	Performance appraisal system provides an opportunity to improve performance
6-Achievement and advancement	14	There are training courses that allow me to progress and improve work
7-Recognition	11	My boss praises the work I do

Scoring system:

Nurses' responses were done on three point liker-scale (one) for "disagree"، (two) for "sometimes"، and (3) for" Agree". For each dimension mean and standard deviation were calculated and converted into percent score. The level of job satisfaction was considered low satisfactory if percent score was less than 33.3%, moderate satisfactory if percent score was 33.3% to less than 66.7% and high satisfactory if percent score was 66.7% or above [7].

Validity and Reliability of data collection tools:

Validity of EI scale was done by **Ahmed** [11]. The reliability of the EI scale was conducted by **Elhlwany** [12] through testing its internal consistency using Cronbach alpha coefficient. It showed high reliability as shown below:

Table (3): Reliability score for the study tool.

	No of items	Cronbach's Alpha
Emotional intelligence	51	0.711

Validity and reliability of job satisfaction scale was done by *Khedr* [13].

Pilot Study:

A Pilot study was carried out on10% of the study participants (No=7) head nurses) in aforementioned setting. The pilot study aimed at test the clarity of the tools language, feasibility, applicability of the tools and to identify the obstacles and problems may meet participants. The pilot study also helped to estimate the time needed for filling the forms.it was ranged between 30-45 min. Data collected were analyzed and no modifications were done so the participants in the pilot study were included.

Field Work:

The actual field work started at the beginning of February to the end of April 2023. To carry out the study, an approval was obtained from the medical and nursing director of different departments affiliated to Military hospital. A letter was issued to them from Director of Military Institute of Military Medical Academy, explaining the aim of the study in order to obtain their permission and cooperation. The researcher visited the study setting 3days / weekly at morning shift to collect data at the beginning the researcher met head nurses in their work place to explain the aim of the study and invite them to participate. They were reassured that the information collected would be used for the scientific research only and would be treated with confidentiality. The questionnaire sheets were distributed to the respondents individually in their work setting by the researcher in the mooring from: 8 AM to 9 AM three days per week (Saturday, Sunday, and Monday). The time needed to complete the sheets ranged from 30-45 minutes, then collected them and every questionnaire was checked for accuracy & completeness, if any defect was found, the questionnaire was returned to head nurses in order to complete and correct the data. The return rate was 100%.

Administrative and Ethical considerations:

An official letter was issued from the director of institute of military medical academy to the director of the El-Galaa military complex, to obtain his approval and cooperation for data collection. This letter explained the aim of the study, with attached copies of the data collection tools. Permission for the study was obtained from the directors of the complex, either medical or nursing.

An official permission to conduct the purposed study was obtained from the military institute of health and epidemiology and military medical academy. A Permission was obtained from general manager of the El-Galaa hospital to start the study. All subjects were informed that participation in the study is voluntary and based on the head nurse's agreement by verbal approval after explaining the purpose and nature of the study, starting confidentiality of the information was grunted that anonymity of the participants was assured by allocation of code number to the forms. Subjects were informed that this data was used for the research purpose only. Each participant was informed that he \she has the right to withdraw from the study at any time without giving any reason.

Statistical design:

Data were entered into a Microsoft Excel sheet and then analyzed using the Statistical Package for Social Sciences (SPSS) software program version 25.0. Statistical significance tests were used and probability value (P value) of less than or equal (0.05) was considered statistically significant (At 95% level of confidence).For descriptive statistics it were presented as (Means ± Standard Deviation) for quantitative variables, and as (Percent) for qualitative variables and Student t test was used to test significance of difference for quantitative variables. For relations between qualitative variables, Chi square test was used.

Results

Table (4) shows characteristics of participants. As regards the characteristics of the studied nurses it was found that, the majority were females 67(97.1%), 42(61.0%) were married and only one nurse had master degree. The mean age was 27.5±2.3 years. Forty participants (58.0%) aged ≤ 27 years, all of them didn't receive training about emotional intelligence and thirty-three (47.8%) had experience less than five years.

Table (5) demonstrates that the majority of respondents expressed moderate satisfaction, accounting for 73.9% of the participants. On the other hand, 26.1% reported high satisfaction with their salaries. In terms of administrative factors, a significant majority (81.2%) indicated high satisfaction, while only 18.8% expressed moderate satisfaction. The interpersonal aspect of work showed a similar trend, with 85.5% of respondents reporting high satisfaction and 14.5% expressing moderate satisfaction. When it comes to the overall work condition, 69.6% of participants reported high satisfaction, while 30.4% indicated moderate satisfaction. Work itself levels appeared to be predominantly high, with 76.8% of respondents expressing satisfaction in this area, while 23.2% reported moderate satisfaction. In terms of achievement, a substantial majority (91.3%) indicated high satisfaction, leaving only 8.7% with moderate satisfaction. Lastly, recognition in the workplace showed a similar pattern, with 75.4% of participants reporting high satisfaction and 24.6% expressing moderate satisfaction.

Table (6) reveals Satisfaction level of participants that the majority of participants have high satisfaction level (58, 84.1%).

Factors affecting Satisfaction level:

Table (7) shows that participants with moderate and high satisfaction level had statistical insignificant differences in demographic factors as p>0.05, while participants with high satisfaction level had significantly higher mean of age and experience than participants with moderate satisfaction level with statistical significant differences as p<0.05.

Table (8) demonstrates Majority of participants had moderate Emotional intelligence level (41, 59.4%).

Table (9) shows that Overall Emotional intelligence score was 59.6± 6.5%, the highest average domains were in interpersonal, adaptability and general mode with average 63.6±11.0%, 62.2±8.0 and 59.9±5.7% respectively. On the other hand, participants had lower scores in intrapersonal and stress domains with 54.2±9.1 and 58.4 ±8.8 respectively.

Factors affecting emotional intelligence level:

Table (10) Participants with moderate and high EI level had statistical insignificant differences in demographic factors as p>0.05, while participants with moderate EI level had significantly lower mean of age and more married than participants with low EI level with statistical significant differences as p<0.05 .

Table (11) Participants with moderate emotional intelligence had significantly higher satisfaction level 40 (97.6%) compared to participants with high satisfaction level 18(64.3%) with p <0.001.

Table (12) The distribution of emotional intelligence domains among the respondents. In the domain of intrapersonal emotional domain, 66.7% of the participants demonstrated low levels, while the remaining 33.3% showed moderate levels. Moving on to interpersonal domain, 31.9% of the respondents exhibited low levels, while a majority of 60.9% displayed moderate levels. Interestingly, a small

percentage of 7.2% indicated high levels of interpersonal domain.

When it comes to adaptability, the majority of participants (87.0%) showed moderate emotional intelligence, with only 13.0% demonstrating low levels. In terms of stress management, 36.2% of the respondents reported low emotional intelligence, while 63.8% displayed moderate levels. Lastly, in the general mode domain, 30.4% of the participants indicated low levels, while a significant majority of 69.6% expressed moderate emotional intelligence.

These findings provide valuable insights into the emotional intelligence profiles of the respondents across different domains. The majority of participants demonstrated moderate levels of emotional intelligence in various aspects, such as interpersonal emotional, adaptability, stress management, and general mode. However, there were notable proportions of respondents with low emotional intelligence in the intrapersonal domain and stress management domains.

Correlation between total satisfaction domain and other satisfaction and Emotional intelligence domains:

Table (13) There was weak negative insignificant correlation between Total satisfaction domain and emotional domain (r=-0.02, p=0.872).

Discussion:

The relationship between emotional intelligence and job satisfaction has gained the attention of researchers as it is reported that emotional intelligence plays a pivotal role in predicting job satisfaction among employees [14]. Higher emotional intelligence will influence job satisfaction of employees. This is because the employees with higher emotional intelligence are able to develop strategies to overcome the possible consequences which may arise out of stress whereas those with less emotional intelligence won't be in a position to overcome the stress situations **Han et al.** [14]. **Daus and Ashkanas** [15] mentioned in their study, emotional intelligence as a key predictor of organizational outcome including job satisfaction. Employees with high emotional intelligence show better performance than their colleagues which leads to higher job satisfaction **Nehad and Mohammed** [16]**.** Therefore, this study aimed to assess the effect of head nurses 'emotional intelligence on job satisfaction in a military hospital.

Regarding the demographic characteristics in this study it was found that, the majority of study subjects were 67 females (97.1%), and 2 males (2.9%).This finding could be due to the dominance of females in the nursing profession and low males involvement in nursing. This results was in agree with **Nehad and Mohamed** [17] who reported that, the majority of his study subjects were females

In relation to the social status it was found that, 42(61.0%) were married this results were supported by the results of **Nehad and Mohamed** [18] who concluded that, the majority of his study subjects were married

Regarding the age of study subjects, the results of this study concluded that, the mean age of study subjects was 27.5±2.3 years. Forty participants (58.0%) aged ≤ 27 years while **Nehad and Mohamed** [17] in his study found that. about half of the sample age ranged between 30 to 40 years old.

As regard the training program this study reported that, all of subjects did not received any training about emotional intelligence. From the researcher point of view, this may be due to negligence of the hospital training centers to this type of training.

The results of this study found that, thirty-three head nurses (47.8%) had experience less than five years, while **Nehad and Mohamed** [18] reported that, the majority of subjects in their study had experience ranged between 1 to 10 years.

Regarding head nurses level of job satisfaction. It was found that, majority of study participants had high job satisfaction level (84.1%). Overall satisfaction score of them was 79.2± 9.6%. this result was in agree with **Rashad et al.** [6] who stated that there was a higher level of job satisfaction among his study participants. While, the study results were disagree with **Nehad and Mohamed** [17] who found that, the majority of study participants had a moderate level of job satisfaction.

Study conducted by *Emine and Ozlem* [19] was disagree with these results, they found that average job satisfaction levels among their participants was middle level (X=15.62, SS=3.27).

The results of the present study showed that, the highly satisfied participants had significantly higher mean of age and years of experience than moderately satisfied participants had. In the same line, **Lorber and Skela-Savič** [20] reported that Job satisfaction for nurses in Slovenian hospitals was related to the age of respondents (β = 0.191; *P* = 0.033), number of years they had worked at the current hospital (β = 0.193; *P* = 0.033). These predictors explained 45.7% of variance for the job satisfaction level of nurses. **Onuoha and Segun** [21] disagree with these results. He reported a negative relationship between age and job satisfaction.

From researcher points of view, the current study results may be due to that older head nurses may have more experience so they can deal with the difficult situations. So they have higher productivity and consequently they had satisfaction with work

The mean score of all satisfaction domains for older participants with longer experience were significantly higher than those younger with shorter experience. Similarly **Mohammadi and Yekta** [22] study found that there is a relationship between age, years of service and education level with job satisfaction.

The result of this study showed high satisfaction level of participants with work condition (69.6%). These results were agree with **Lorber and Skela-Savič** [20] who found nurse leaders had significantly higher satisfaction (*t* = 2.946; *P* = 0.003) with the work condition (mean ± standard deviation, 4.27 ± 0.6).

As regards emotional intelligence, majority of the study participants had moderate emotional intelligence level (59.4%) with the highest average domains were in interpersonal, adaptability and general mode. The results of the current study were in disagreement with **Nehad and Mohamed** [18] who found that, the majority of subjects had a high level of emotional intelligence. In the same line, these results were matched with a study carried out by

Mousavi et al. [23] that assessed the relationship between emotional intelligence and job satisfaction of physical education teachers. He found that the participants had high level of emotional self-regulation.

From researcher points of view, this may be because of the ability they had for monitoring, evaluating and modifying emotional reactions in a manner that is socially tolerable and sufficiently flexible. Also the results of current study, might be due to many factors at the beginning cultural, environmental and social support factors, which help them to be aware of their emotions also aware by needs and feelings of others, and might be due to knowledge and skills, which acquired from practical practice in the work place, and exposure to emergency and critical situations.

On the other hand, lower scores were founded in intrapersonal relation and stress management domains this may be due to the strict policies and regulations in the military hospitals

In the same line, this result is in disagreement with the result of the study conducted in Jordan by **Al-Faouri et al.** [24] to assess the relationship between emotional intelligence and job satisfaction among nurses. They reported that the study participants have a high level of self- motivation. And also these results are in disagreement with the results of the study conducted by **Emdady and Bagheri** [25] who reported a high level of achievement among employee in the organization as social awareness is important dimension for emotional intelligence.

As regards the head nurses age, it was found that, head nurses with lower age had moderate emotional intelligence level. This results were in agree with **Fariselli et al.** [26] who reported that some parts of emotional intelligence (EQ) do increase with age, though the effect is slight.

As regard the marital status, the results of this study found that, the married participants had moderate emotional intelligence. Married participants had significantly higher mean scores of intrapersonal and interpersonal domains than singles. While married participants had significantly lower mean score of adaptability than singles. In the same line, the

mean score of all emotional intelligence domains for older participants with longer experience were significantly lower than younger participants with shorter experience. This results were in disagreement with **Vahidi et al.** [27] who reported in their study entitled "The Relationship between Emotional Intelligence and Perception of Job Performance among Nurses in North West of Iran" that, there was no significant correlation between emotional intelligence and nurses' perception of job performance with factors such as age, sex, marital status, education level, and working experience.

The result of this study revealed that the number of highly satisfied participants in moderate emotional intelligence group was 40 (97.6%) compared to 18(64.3%) This was statistically significant with p <0.001 being higher in moderate emotional intelligence group**.** In the same line, correlation between total job satisfaction domains and total emotional domains the current study proved that, there was weak negative insignificant correlation between Total satisfaction domain and emotional domain (r=-0.02, p=0.872). While adequate Salary domain, appropriate administration, interpersonal, stress management and general mode had significant correlations with emotional intelligence.

This is in agreement with **Mshellia et al.** [28] study which found that there is no significant relationship between Emotional Intelligence and Job Satisfaction of nursing professionals in selected hospitals in Jos metropolis of Nigeria. Also, **Oliveira and Ricardo** [29] supported these result who found that, the direct relationship between EI and job satisfaction is very low and not significant (H1: β = -0.096, t = -1.161).

In contrast to **Nehad and Mohamed** [18] study revealed that there is positive relationship between emotional intelligence and job satisfaction. Another studies conducted revealed that, there was a positive relationship between emotional intelligence and job satisfaction and direct correlation between emotional intelligence and job satisfaction of Primary health care providers [3; 6]. In the same line study carried by **Sunita and Bhavana** [30] indicate that there is positive, moderate, significant relationship between emotional intelligence and job satisfaction (r (120) = 0.341, p= 0.031 < 0.05). This result reveals that the employees with higher level of emotional intelligence are more satisfied with their jobs.

Conclusion:

Majority of participants had moderate Emotional intelligence level and high job satisfaction level. Participants with moderate emotional intelligence had significantly higher satisfaction level. Head nurses had high satisfaction level with the highest average domains were in interpersonal, motivation and achievement high job satisfaction. Finally, there was strong positive linear correlation between head nurses job and their emotional intelligence while there was weak negative insignificant correlation between total satisfaction domains and total emotional domains.

Recommendations:

Based on the study finding, it was recommended to conduct programs on emotional intelligence for head nurses and other staff nurses to increase self-awareness. Measuring and analyzed job satisfaction of the nurses should be done periodically. Promotion system should be adopted by hospital managers and salary adequacy should be put into consideration of organization administrators.

Table (4): Personal and job Characteristics of the studied subjects (n=69)

		n (%)
Age groups	≤27	40(58.0)
	>27	29(42.0)
Age(yrs.)	Mean ±SD	27.5±2.3
	Range	24-34
Training	Yes	0
	No	69(100.0)
Experience years	<5	33(47.8)
	≥5	36(52.2)
Years of experience	Mean ±SD	5.0±1.9
	Range	2-10

SD: Standard deviation

Table (5): Number and percentages of head nurses regarding to their satisfaction level (n=69)

Satisfaction scale domains	Level of satisfaction	No	%
I. Hygiene factor			
Adequate salary	*Moderate	51	73.9%
	**High	18	26.1%
Appropriate administration	Moderate	13	18.8%
	High	56	81.2%
Interpersonal relation	Moderate	10	14.5%
	High	59	85.5%
Work condition	Moderate	21	30.4%
	High	48	69.6%
II. Motivation factor			
Work itself	Moderate	16	23.2%
	High	53	76.8%
Achievement advancement	Moderate	6	8.7%
	High	63	91.3%
Recognition	Moderate	17	24.6%
	High	52	75.4%

*Moderate: 33.3% ≥ 66.7%   **High: 66.7% +

Table (6): Satisfaction level among the studied participants (n=69)

Head nurses' satisfaction Level	Frequency	Percent
Moderate (: 33.3% ≥ 66.7%)	11	15.9
High (66.7% +)	58	84.1
Total	69	100

Table (7): Demographic characteristics in relation to job satisfaction level (n=69)

		Job Satisfaction Level		
		Moderate n=11(15.9%)	**High n=58(84.1%)**	**P value**
Age(yrs.)	Mean ±SD	25.7 ± 0.5	27.9±2.4	**0.004**[a]
	Range	25 – 26	24-34	
Gender	Male	0 (.0)	2(3.4)	0.532[b]
	Female	11 (100.0)	56(96.6)	
Marital status	Single	6 (54.5)	21(36.2)	0.253[c]
	Married	5 (45.5)	37(63.8)	
Education	Bachelor	10 (90.9)	58(100.0)	0.159[b]
	Master	1 (9.1)	0(.0)	
Experience year	Mean ±SD	3.7 ± 0.5	5.5±1.9	**0.004**[a]
	Range	3-4	2-10	

SD: standard deviation, p<0.05 is statistically significant, a: analysis done by independent t test, b: analysis done by fisher exact test, c: analysis done by chi square test

Table (8): Emotional intelligence level among the studied participants (n=69)

		Frequency	Percent
Emotional intelligence level	**Low**	28	40.6
	Moderate	41	59.4
	Total	69	100

Table (9): Emotional intelligence score domains among the studied participants (n=69)

Domains	Mean	SD	Median	Minimum	Maximum
Intrapersonal	29.8	5.0	30	22	38
Intrapersonal %	54.2	9.1	54.5	40	69.1
Interpersonal	28.6	4.9	29	17	41
Interpersonal %	63.6	11.0	64.4	37.8	91.1
Adaptability	34.2	4.4	35	23	40
Adaptability %	62.2	8.0	63.6	41.8	72.7
Stress management	23.4	3.5	24	16	29
Stress management %	58.4	8.8	60	40	72.5
General Mode	32.9	3.2	34	24	37
General Mode %	59.9	5.7	61.8	43.6	67.3
Emotional intelligence total	149	16.3	153	105	170
Emotional intelligence total %	59.6	6.5	61.2	42	68

SD: standard deviation

Table (10): Demographic characteristics in relation to emotional intelligence level (n=69)

		Emotional intelligence level		P value
		Low n=28 (40.6%)	**Moderate** n=41 (59.4%)	
Age(yrs.)	**Mean ±SD**	28.4±2.9	27.0±1.5	**0.015[a]**
	Range	25-34	24-29	
Gender	**Male**	1(3.6)	1(2.4)	1.000[b]
	Female	27(96.4)	40(97.6)	
Marital status	**Single**	15(53.6)	12(29.3)	**0.042[c]**
	Married	13(46.4)	29(70.7)	
Education	**Bachelor**	28(100.0)	40(97.6)	0.405[b]
	Ms	0(.0)	1(2.4)	
Experience year	**Mean ±SD**	5.5±2.3	5.0±1.5	0.317
	Range	2-10	2-8	

SD: standard deviation, p<0.05 is statistically significant, a: analysis done by independent t test, b: analysis done by fisher exact test, c: analysis done by chi square test

Table (11):   Relation between satisfaction level and Emotional intelligence level among head nurses (n=69)

		Emotional intelligence level		P value
		Low n=28(40.6%)	**Moderate** n=41(59.4%)	
Satisfaction level	**Moderate**	10(35.7)	1(2.4)	**<0.001**
	High	18(64.3)	40(97.6)	

p<0.05 is statistically significant, analysis done by chi square test

SD: standard deviation, p<0.05 is statistically significant, analysis done by independent t test

Table (12): Emotional intelligence with other domains (n=69)

Emotional intelligence domains	Level of emotional intelligence High: more than ≥75%, moderate 60 to ≤75%, and Law ≤60%	No	%
Intrapersonal domain	Low	46	66.7%
	Moderate	23	33.3%
Interpersonal domain	Low	22	31.9%
	Moderate	42	60.9%
	High	5	7.2%
Adaptability	Low	9	13.0%
	Moderate	60	87.0%
Stress management	Low	25	36.2%
	Moderate	44	63.8%
General mode	Low	21	30.4%
	Moderate	48	69.6%

Table (13):   Total satisfaction in relation to Emotional intelligence and satisfaction scale domains

	Total satisfaction	
	Correlation coefficient	p value
Emotional intelligence and satisfaction scale domains Emotional	-0.02	0.872

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