Assessment of Emotional Intelligence among Nurses Working with Patients with Alzheimer Disease.

Bahaa Eldin Abd Ellatif Ali [1], Pro.Dr. Omayma Abou Bakr [2], Pro.Dr. Ghada Mourad[3]
(1) Master degree in Psychiatric and Mental Health Nursing, Ain Shams University, Egypt (2) Professor of Psychiatric and Mental Health Nursing, Ain Shams University, Egypt (3) Professor of Psychiatric and Mental Health Nursing, Ain Shams University, Egypt.

Abstract

Background: Nurses are the corner stone of the health care systems and their work is associated with great pressure, and nurses are often overwhelmed. Emotional intelligence and its significance to nursing have been increasingly emphasized throughout the last few years. Emotional intelligence is composed of a deposit of interrelated skills involving a capability to appraise one's own emotions, and those of others, utilization & regulation of own emotions and social skills. **Research Design:** a descriptive design was used. **The aim** of this study was to assess of emotional intelligence among nurses working with Alzheimer patients. **Setting** The study was conducted at geriatric units of Ain Shams Hospitals and geriatric department of Abassia Hospital affiliated to Ain Shams University. **Sampling**: It was convenience sampling, a total number of (70) of nursing staff who are working in the mentioned setting. **Tools**; one tool was used for data collection, a Self-Administered Questionnaire including four parts; **part one:** socio demographic characteristics nurses, Part **two:** The Emotional Intelligence Scale (EIS) to assess emotional intelligence in managing workplace. **Results**: the current study revealed that more than half of nurses have low level of total of emotional intelligence, and one of third of them have moderate level of emotional intelligence However minority of them have high level of emotional intelligence. **Conclusion**: The result of the current study concluded that more than half of the nurses in this study have low levels of emotional intelligence. and the highest mean of emotional intelligence domain among nurses was social skills domain, Self-awareness, empathy, managing emotions and the low mean was self-motivation Recommendations: The study recommended that hospital should provide continuous Inservice training education and awareness program for nursing staff to enhance their skills regarding emotional intelligence.

Key words: Emotional intelligence, Nurse & Alzheimer patients.

Introduction

Alzheimer's disease (AD) was identified in 1906 by Alois Alzheimer that examined brain of woman who died after mental illness found abnormal clumps and tangled fibers. Alzheimer's disease is neurological disorder in which the death of brain cells causes memory loss and cognitive decline. This is neurogenerative type of dementia in which the disease starts mild and gets progressively worse **(Durán, G., et al., 2020 and Adolfo C.S., et al., 2021).**

Alzheimer's disease (AD) has a major impact by limiting the ability to live independently. This condition of dependency involves all members of the family, particularly those who talk direct care of patients. The

changes that take place in caregivers' lives may alter their health and have an effect on the care of the sick. The gradual and continuous decline caused by Alzheimer's disease is characterized by cognitive deterioration, changes in behavior, loss of functional independence and increasing requirement for care **(Li, X., & et.al 2021 and Alhazzani, A. A, et al., 2020).**

Effective nursing interventions are vital to managing patients with Alzheimer's disease. Progressive and severe deterioration of functional and cognitive abilities results in disruptive behaviors that can be in capacitating and even harmful to Alzheimer's disease patients. The cognitive and behavioral problems associated with Alzheimer's disease require specific nursing interventions to provide for the

safety and well-being of patients **(Brooke, J., et al. 2029 and Lowey, S. E. 2018).).**

Nurses are the first line of the health care systems., this is because other healthcare professionals such as doctors and therapists spend limited amounts of time with patients.; they spend the most time with patients and are constantly exposed to the emotional strains of dealing with the sick and death. This is associated with feelings of hopelessness, difficulties in dealing with work and doing one's job effectively (**Araujo, C. et al. 2017 and Lam, A., et al. 2020**).

Emotional intelligence has recently emerged in both academic and popular literature as a concept with the potential to provide new insights into the effect of human interaction. One type of interaction and between team members. Team members must have high emotional intelligence in order to deal with interpersonal and intrapersonal conflicts, raise communication and commitment and to accomplish team goals. Emotional intelligence is a set of abilities, capability and other cognitive skills which assist in the success of coping with and overcoming environmental stress, identify their own emotions, manage and understand others' emotional phenomena and motivate themselves in situations that are embarrassing, problematic and generate intrinsic and extrinsic conflicts **(Cejudo, IJ. et al., 2018 and Dugué M., et al., 2021).**

Others' benefits of EI, allows the development of effective relationship between nurses and clients by being in tune with their own emotions and others' staffs as well. It involves the capability of nurses to recognize emotion in others' facial and body impressions. The capability to distinguish emotions in others' is a highly valuable social skill that requires the ability to acknowledge subtle social cues. When a person is able to know own emotions, others' emotions and differentiate among emotional conditions they are displaying emotional perception capability. (**Cassano, F., et al. 2020 and Chikobvu, P., et al. 2022**).

Managing own emotion is a skill that gives a person the capability to use their awareness about their own emotions to be adjustable and handle behavior effectively while, the person can't successfully control emotions in others without first controlling their own emotions. Persons who have overcome their own emotions are better able to adjust with changes and help organizations adjust **(Foji, V, M., & et al.2020 and Soto-Rubio, A., et al.2020).**

Significance of the study.

Emotional intelligence helps one to understand and manage emotions, therefore, helping workers to take control of their work. The nursing profession demands that the nurses, in the process of care, has to interact with the patients, the medical members and the health care workers constantly. Hence, " nurses - Patient Interaction" is the pulse of the nursing practice. This interaction is not just conversation. It is a complex process that involves nurses' perception, understanding of the patient emotions and utilization of the perceptions to manage patient situations towards the goal of effective patient care.

Caring for someone with Alzheimer's disease or another type of dementia impacts every aspect of daily life. Patient care not only includes quality nursing care but also a care concept that respecting patient's goals, preferences and choices, obliging their emotional, social and spiritual needs using the strengths of interdisciplinary resources.

Aim of the study

The study aims to assess the emotional intelligence among nurses working with Alzheimer patients through: -

1.Assessing the level of emotional intelligence among nurses.
2.Relation between socio-demographic characteristics of the studied nurses and total emotional intelligence levels

Research question:

What is the level of emotional intelligence among nurses working with Alzheimer patients.

SUBJECTS & METHODS

Technical design

The technical design included research design, setting, subjects and tools of data collection used in this study.

Research Design: An exploratory Descriptive research design was adopted to fulfill the aim of the study and answer the research questions.

Setting: The current study was conducted at geriatric units of Ain Shams Hospitals and geriatric department of Abassia Hospital affiliated to Ain Shams University.

Subjects: A convenient sample included all available nurses at the time of the study (n=70), working in the previously mentioned setting and accepted to participate in the study, from both genders, with bachelor degree qualification, different age groups, and years of experiences were recruited to this study.

Tools of Data Collection

1- Self-administered questionnaire; consisted of two parts

Tool I. Demographic data; It was concerned with the demographic data (age, gender, educational qualifications, marital status and years of experience).

Tool II. Emotional Intelligence Scale (EIS): The Emotional Intelligence Scale (EIS) was originally developed by Hunsaker (2001) to assess emotional intelligence in managing workplace. The scale consists of 25 items, which are rated on a five-point Likert scale that ranges from 1 to 5 with following rating criteria: 1 (very slight ability), 2 (slight ability), 3 (moderate ability), 4 (very much ability) and 5 (extreme ability).

The EIS includes five components **Self-awareness:** means being aware of what you are feeling, it consists of five items 1, 6, 11, 16, 21 of emotional intelligence scale items, **managing emotions:** The second key component of emotional intelligence is managing emotions, as (worry, anxiety, fear) it consists of five items 2, 7, 12, 17, 22 of emotional intelligence scale items, **Motivating:** it consists of five items 3, 8, 13, 18, 23 of emotional intelligence scale items, **Empathy:** The fourth component is empathy, it consists of five items 4, 9, 14, 19, 24 of emotional intelligence scale items **and social skill:** it consists of five items 5, 10, 15, 20, 25 of emotional intelligence scale items.

Scoring system: Sum responses to the 25 questions to obtain overall emotional intelligence score. The score for self-awareness is the total of questions 1, 6, 11, 16, 21. score for managing emotions is the total of questions 2, 7, 12, 17, 22. score for motivating is the sum of questions 3, 8, 13, 18, 23. score for empathy is the sum of questions 4, 9, 14, 19, 24. score for social skills is the sum of questions 5, 10, 15, 20, 25.

This questionnaire provides an indication of emotional intelligence. total score of 100 or more, it indicated high emotional intelligence. A score from 50 to 100 means have a good platform from which to develop emotional intelligence. A score below 50 indicates that person is probably below average in emotional intelligence. For each of the five components of emotional intelligence: self-awareness, managing emotions, motivating one's self, empathy and social skill, a score above 20 is considered high, while a score below 10 would be considered low.

Operational design:

It included preparatory phase, tools validity and reliability, pilot study and field work.

A.   The preparatory Phase:

This phase was carried out through the following steps:

1-   Reviewing of related literature, and theoretical knowledge of various aspects of the study using books, articles, internet, periodicals and magazines to develop data collection tools.

2-   Outlining all components of emotional intelligence guidelines through

extensive review of the literature and other available resources.

Validity and Reliability

Testing validity of it was established by a panel or (jury) of five experts from psychiatric mental health nursing at Faculty of Nursing at Ain Shams University who reviewed the instruments for clarity, relevance, comprehensiveness, simplicity, understanding and applicability. The items on which experts have agreed were included in the proposed tool.

Testing reliability of tool. the purposed tools were tested by Cronbach's Alpha coefficient test, The values were 0.84 showed as strong significant positive correlation between the items of tools revealed that the tools consisted of relatively homogenous items.

Pilot Study: pilot study was carried out on 7 members of nursing staff and excluded from the study. They represent 10% of total sample to ensure clarity, applicability, relevance, feasibility of conduction of the study tools, and time needed for each tool.

Ethical Considerations: An official permission was obtained from the scientific research ethical committee at Faculty of Nursing of Ain Shams University before conduction of the study. The aim of the study was explained to the participant who agree to participated in thy study to obtain their cooperation. Oral consent was obtained from them. The researcher maintains anonymity and confidentiality of them. participant was informed that; they have the right to withdraw from a study at any time without justification

Field Work:

Assessment was done to determine level of emotional intelligence among nurses. Tools of the study were distributed individually to the participant and the researcher asked to fill the questionnaires. Data collection tool was developed in the period from January 2018 until march 2018. Data collection of this study was carried out in the period from March 2018 to march 2019,

Statistical Design:

The collected data were organized, categorized, tabulated and statistically analyzed using the statistical package for social science (SPSS) version (25) to evaluate the effect of training program on emotional intelligence of nurses for Alzheimer patients. Data were presented in tables and charts. **The statistical analysis included;** Qualitative data were expressed as frequency and percentage. A chi-square test was used to accomplish the comparison between two variables of the qualitative data. Comparisons between quantitative variables were performed using an independent sample t-test. Probability (p-value) less than 0.05 was considered significant, and less than 0.001 was considered highly significant

Rustles

Table 1: shows that the mean age of the nurses is 32.8 ±7.3 year, and less than half (44.3%) of them is in the age range of 25< 35 years old. Regarding gender, 81.4% of nurses are females, and the rest are males. Concerning monthly income, almost half of the nurses (54.30%) earn more than 4500 pounds monthly. As regards years of experience, 30.00% of the nurses have 10-15 years of experience with a mean of 9.8 ±4.2 years. Regarding working hours per day 37.10% of nurses work 12 hours per day. Concerning number of daily cases, 62.90% of nurses are assigned on 4-6 cases per day.

Table2: represented the five items of self-awareness domain and reveals that, about one half of studied subjects their self-awareness were ranged from slight (27.1%) and moderate (27.1%) regarding Associate different internal physiological cues with different emotions. This table shows that about one third of studied subjects had slight self-awareness regarding Calm your elf quickly when angry, know what senses you are currently using and know when you become defensive (38.6%, 32.9% 32.9% respectively). as well as Identify when you experience mood shifts., It was revealed that more than one quarter of studied subjects had moderate self-awareness 30.0% respectively.

Table 3: represented the five items of managing emotions domain and reveals that, one thirds of studied subjects had slightly managing emotions related to Relax when under pressure in situations, use internal "talk" to change your emotional state., Stay calm when you are the target of anger from others. & Know when you are thinking negatively and head it off. (32.9%,32.9%,30.0% & 41.4% respectively). less than one half of them (45.7%) had moderate managing emotions from Stay calm when you are the target of anger from others.

Table 4: self-motivation items show that, more than half of studied subjects had slightly self-motivation from Regroup quickly after a setback. (52.9% respectively). Furthermore, more than one third of them had moderate self-motivation from Stop or change an ineffective habit. (41.4% respectively). Also, about one third of them had slightly self-motivation from Follow your words with action and Produce motivation when doing uninteresting work. (31.4% & 37.1%respectively). As well as, about one third of them had very slightly self-motivation (35.7% respectively) from "Gear up" at will for a task.

Table 5: the five items of empathy domain reveals that, more than one third of studied subject had slightly empathy from Know the impact that your behavior has on others, Show empathy to others. & Help others manage their emotions (38.6%,28.6% & 41.4% respectively). However, about (48.6% & 41.4% respectively) of studied subjects had moderate empathy from Engage in intimate conversations with others and recognize when others are distressed.

Table 6: Concerning social domain table, about one third of studied subject had moderately social skills from Build consensus with others, make others feel good. & Accurately reflect people's feelings back to them. (31.4%,35.7% & 28.6% respectively). However, about (47.1% respectively) of studied subjects had slightly social skills from Initiate successful resolution of conflict with others. As well as, about one third of them had very slightly social skills (38.6% respectively) from Provide advice and emotional support to others as needed.

Table 7: demonstrated that the highest mean (14.6+2.6) of the studied sample was social skills domain, Self-awareness, empathy, managing emotions and self-motivation of other emotion subscales (13.7+2.7, 13.5+2.2, 13.1+2.6, and 12.6+2. 3prospectively. **Table 8:** Concerning total emotional intelligence domain, more than half (57.10%) of nurses have low level of emotional intelligence and 37.1% one of third of them have moderate level of emotional intelligence, However, **5.7**% of them have high of emotional intelligence.

Table 9: Regarding factors associated with nurses' emotional intelligence, findings of the current study revealed that, there are positive association between emotional intelligence of nurses and educational level, marital status, and year of experience (p= 0.027, 0.018, 0.047and respectively)

Table 1. Socio-demographic characteristics of the studied nurse sample

	n	%
Age (Years)		
< 25	9	12.9
25 < 35	31	44.3
35 < 45	28	40.0
45 +	2	2.9
Mean ±SD	32.8 ±7.3	
Gender		
Male	13	18.6
Female	57	81.4
Educational Level		
Diploma	36	51.4
Bachler	22	31.4
Postgraduate	12	17.1
Marital Status		
Single	20	28.6
Married	43	61.4
Widow	4	5.7
Divorced	3	4.3
Income		
< 2500	3	4.3
2500 – 3500	8	11.4
3500 – 4500	21	30.0
> 4500	38	54.3
Experience (Years)		
< 5	17	24.3
5 – 10	20	28.6
10 – 15	21	30.0
> 15	12	17.1
Mean ±SD	9.8 ±4.2	
Work Hours		
6 hours	23	32.9
12 hours	26	37.1
24 hours	21	30.0
Number of daily cases		
< 4	13	18.6
4 – 6	44	62.9
> 6	13	18.6

Table 2. Distribution of studied sample according to their Emotional Intelligence regarding (self-awareness domain)

Items	Self-awareness domain									
	Very Slightly		Slightly		Moderately		Much		Very Much	
	n	%	n	%	n	%	n	%	n	%
Associate different internal physiological cues with different emotions.	11	15.7	19	27.1	19	27.1	13	18.6	8	11.4
Calm your elf quickly when angry.	21	30.0	27	38.6	10	14.3	3	4.3	9	12.9
Know what senses you are currently using.	16	22.9	23	32.9	16	22.9	7	10.0	8	11.4
Identify when you experience mood shifts.	3	4.3	8	11.4	21	30.0	22	31.4	16	22.9
Know when you become defensive.	12	17.1	23	32.9	29	41.4	5	7.1	1	1.4

Table 3. Distribution of studied sample according to their Emotional Intelligence regarding (managing emotion domain)

Items	managing emotion domain									
	Very Slightly		Slightly		Moderately		Much		Very Much	
	n	%	n	%	n	%	n	%	n	%
Relax when under pressure in situations.	21	30.0	23	32.9	14	20.0	7	10.0	5	7.1
Know when you are becoming angry.	10	14.3	5	7.1	26	37.1	17	24.3	12	17.1
Use internal "talk" to change your emotional state.	17	24.3	23	32.9	17	24.3	6	8.6	7	10.0
Stay calm when you are the target of anger from others.	6	8.6	21	30.0	32	45.7	8	11.4	3	4.3
Know when you are thinking negatively and head it off.	16	22.9	29	41.4	14	20.0	8	11.4	3	4.3

Table 4. Distribution of studied sample according to their Emotional Intelligence regarding (self-motivation domain)

Items	self-motivation domain									
	Very Slightly		Slightly		Moderately		Much		Very Much	
	N	%	N	%	n	%	n	%	n	%
"Gear up" at will for a task.	25	35.7	18	25.7	16	22.9	4	5.7	7	10.0
Regroup quickly after a setback.	15	21.4	37	52.9	4	5.7	4	5.7	10	14.3
Produce motivation when doing uninteresting work.	21	30.0	26	37.1	17	24.3	4	5.7	2	2.9
Stop or change an ineffective habit.	2	2.9	6	8.6	29	41.4	32	45.7	1	1.4
Follow your words with actions.	18	25.7	22	31.4	16	22.9	8	11.4	6	8.6

Table 5 Distribution of studied sample according to their Emotional Intelligence regarding (empathy domain)

Items	Empathy domain									
	Very Slightly		Slightly		Moderately		Much		Very Much	
	n	%	n	%	N	%	n	%	n	%
Know the impact that your behavior has on others.	17	24.3	27	38.6	16	22.9	6	8.6	4	5.7
Recognize when others are distressed.	7	10.0	16	22.9	29	41.4	5	7.1	13	18.6
Help others manage their emotions.	9	12.9	29	41.4	21	30.0	7	10.0	4	5.7
Show empathy to others.	13	18.6	20	28.6	16	22.9	13	18.6	8	11.4
Engage in intimate conversations with others.	9	12.9	12	17.1	34	48.6	11	15.7	4	5.7

Table 6. Distribution of studied sample according to their Emotional Intelligence regarding (social skills domain)

Items	social skills domain									
	Very Slightly		Slightly		Moderately		Much		Very Much	
	n	%	n	%	N	%	n	%	n	%
Initiate successful resolution of conflict with others.	21	30.0	33	47.1	5	7.1	3	4.3	8	11.4
Build consensus with others.	15	21.4	19	27.1	22	31.4	5	7.1	9	12.9
Make others feel good.	5	7.1	12	17.1	25	35.7	16	22.9	12	17.1
Provide advice and emotional support to others as needed.	27	38.6	23	32.9	15	21.4	4	5.7	1	1.4
Accurately reflect people's feelings back to them.	16	22.9	17	24.3	20	28.6	12	17.1	5	7.1

Table 7. Total Mean and Stander Deviation of the studied sample regarding their Emotional intelligence Subscale (No.70)

Items	Mean ±SD
Self-Awareness	13.7+2.7
Managing Emotions	13.1+2.6
self-motivation	12.6+2.4
Empathy	13.5+2.2
Social skills	14.6+2.6
Total Emotional intelligence	67.5+5.4

Table 8. Total levels of emotional intelligence among the studied sample (No.70)

Items	Total emotional intelligence					
	Low		Moderate		High	
	n	%	n	%	n	%
Self-Awareness	41	58.6	25	35.7	4	5.7
Managing Emotions	41	58.6	26	37.1	3	4.3
Motivating Yourself	44	62.9	23	32.9	3	4.3
Empathy	39	55.7	28	40.0	3	4.3
Social Domain	37	52.9	28	40.0	5	7.1
Total Score	**40**	**57.1**	**26**	**37.1**	**4**	**5.7**

Table 9. Association between socio-demographic characteristics of the studied nurses and their total emotional intelligence levels

	Low		Moderate		High		Chi-Square	
	n	%	n	%	n	%	X^2	P
Age (Years)								
< 25	4	10.0	4	15.4	1	25.0		
25 – 35	20	50.0	9	34.6	2	50.0		
35 – 45	15	37.5	12	46.2	1	25.0		
> 45	1	2.5	1	3.8	0	0.0	2.470	0.872
Gender								
Male	7	17.5	5	19.2	1	25.0		
Female	33	82.5	21	80.8	3	75.0	0.147	0.929
Educational Level								
Diploma	21	52.5	13	50.0	2	50.0		
Bachler	11	27.5	9	34.6	2	50.0		
Postgraduate	8	20.0	4	15.4	0	0.0	11.005	0.027*
Marital Status								
Single	11	27.5	9	34.6	0	0.0		
Married	23	57.5	16	61.5	4	100.0		
Widow	3	7.5	1	3.8	0	0.0		
Divorced	3	7.5	0	0.0	0	0.0	15.375	0.018*
Income								
< 2500	1	2.5	2	7.7	0	0.0		
2500 – 3500	5	12.5	3	11.5	0	0.0		
3500 – 4500	15	37.5	5	19.2	1	25.0		
> 4500	19	47.5	16	61.5	3	75.0	4.367	0.627
Experience (Years)								
< 5	10	25.0	5	19.2	2	50.0		
5 – 10	9	22.5	9	34.6	2	50.0		
10 – 15	13	32.5	8	30.8	0	0.0		
> 15	8	20.0	4	15.4	0	0.0	9.654	0.047*
Work Hours								
6 hours	16	40.0	7	26.9	0	0.0		
12 hours	14	35.0	9	34.6	3	75.0		
24 hours	10	25.0	10	38.5	1	25.0	4.839	0.304
Number of daily cases								
< 4	8	20.0	4	15.4	1	25.0		
4 – 6	27	67.5	16	61.5	1	25.0		
> 6	5	12.5	6	23.1	2	50.0	5.074	0.534

Discussion

Emotional intelligence can assist nurses in managing their own and their patients' emotions, showing genuine emotional responses, being empathetic and communicate emotions without introducing conflict and managing instinctive emotions, such as disgust, annoyance and frustration, in nurse-patient interactions. By trying to view the situation from patients' perspectives and empathizing with their emotions, nurses can manage many clinical situations. when a nurse who demonstrates EI skills cares for patients, those patients feel that the nurse is actually concerned about their welfare and health, which is the essence of nursing and caring.

As regard to age, findings of the present study revealed that approximately less than half of them is in the age range of 25- 35 years old with a mean age of (32.8 + 7. 3). As well, more than three-quarters of the studied nurses their age's less than 45 years and constitute the higher percentage in the study.

These results are in agreement with **Issa et al., (2022)** who conducted a study to assess the relationship between emotional intelligence and pain management awareness among nurses. They reported that, less than half of the sample is in the age range of 25- 35 years old and more than three-quarters of the studied nurses aged less than 45 years.

In relation to gender, it was found that most of the studied subjects were females and the rest are male. This finding might be due to most of nursing schools and faculties in the past are allowed only for female students while male students are recently accepted. As well as, in our culture nursing profession is considered more suitable for females to help themselves and their families in caring and financial support.

This finding is in the same line with the study of **Ramadan et al (2020)** who carried out a study to examine the effect of emotional intelligence program on nursing student and reported that the majority (92%) of the sample are females.

Considering monthly income, it was found that approximately half of studied subjects had belonged to middle-income group. This may be explained by low salaries of nursing staff in Egypt in spite efforts made to improve quality of life for nurses in the last years, but it is still unsatisfactory for them especially that around two-thirds of the studied nurses were married.

This result was agreed with the result of **Li et al. (2021)** who reported that more than half of studied subjects had belonged to middle-income group according his study about relationship between emotional intelligence and job well-being in Chinese registered nurses.

Concerning years of experiences, the present study revealed that more than one-third of studied subjects had from ten to fifteen years of experience with a mean of (9.8+ 4.2) and more than one-quarter of them had from five to ten years of experiences. It could be due to the mean age of the studied nurses.

This finding is in the line with the finding of **Shoukry et al. (2022)** study about relationship between nurses' emotional intelligence and their safety practice for elderly patients. They reported that about one-third of studied subjects had from 10-15 years of experience. Another study conducted by **Hassan et al. (2019)** aimed to assess work related stress, burnout and self-efficacy among psychiatric nurses and revealed that more than one-third of the studied sample had from 5 to10 years of experience.

Regarding marital status, the current study findings reveled that, around two-thirds of nurses are married. This high percentage is due to the cultural and religious customs of the Egyptian society especially in rural areas. This finding is in agreement with the finding of **Khademi (2020)** who emphasized that majority of the respondents were married in a study that "examine emotional intelligence and quality of nursing care".

In relation to self-awareness and managing emotion domain, the current study revealed that, about three-fifths of the nurses have low level of self-awareness and managing emotion Furthermore, only small percentage of

them have high level of self-awareness and managing emotion. Which the mean score of self-awareness was 13.7+2.7 & 13.1+2.6 of managing emotion.

These findings Similarly, **Talman et al. (2019)** in their study about emotional intelligence of nursing applicants and factors related to it found that, have low level of self-awareness and there was a statistically significant increase in mean score of emotional self-awareness after receiving the intervention.

Concerning self-motivation domain, the current study revealed that, the mean self-motivation score was 12.6+2.4. Furthermore, more than one-half of the nurses have low level of self-motivation and one third of studied sample had moderate level of emotional intelligence.

This finding is matched with the study conducted by **Farghaly et al. (2019)** aimed to examine the effect of head nurses' emotional intelligence educational program on nurses' motivation and organizational support. Their findings showed that, staff nurse motivation increased from a low-level before the program implementation to a high-level post-intervention and after three months. As well as, there are a highly statistically significant differences among all items of self-motivation domain.

As regards total emotional intelligence scores, the current study revealed that, the more than half of nurses have low level of emotional which one of third of them have moderate level of emotional intelligence, However, small group of them have high of emotional intelligence. From the investigator point of view, these results show that self-awareness is the cornerstone of emotional intelligence. This is because it takes the knowledge of self to be able to read, understand and relate with others. This means that one can understand and relate well with others only when one is fully aware of oneself, therefore the nursing staff need program to increasing their self-awareness.

This result was contradicted to a study carried out by **Rakhshani, T., & et al (2018)** in their study who analysis the emotional intelligence and its impact on stress management

among nurses in private hospitals, who noticed that the highest percentage of staff nurses had high level of emotional intelligence Whereas this is supported with **Srinivasan & Samuel,(2016)** in their study to assess emotional intelligence of staff nurses working in villipuram district. As they reported that more than half the staff nurses recognized low level regarding to level of Emotional Intelligence. And with the finding of **Zaki et al. (2018)** who studied the effect of emotional intelligence program on decision making style.

Relationship between emotional intelligence and sociodemographic characteristics, the current study results revealed that there was no significant relationship between emotional intelligence and sociodemographic characteristics regarding to gender of studied sample, the sample had low level of emotional intelligence.

This study result was contradicting with **Vahidi, Areshtanab & Bostanabad, (2016)** in their study to assess the relationship between emotional intelligence and perception of job performance among nurses. In which who stated that there was significant association between emotional intelligence regarding to gender, While this result matched with **Tofighi, Tirgari, Rasouli & Jalali, (2015)** in their study to analysis the relationship between emotional intelligence and organizational citizenship behavior in critical and emergency nurses in south east of Iran, who revealed that there was no significant relation between emotional intelligence and nurses' sex, these results remind us that emotional intelligence can be learned and developed at any gender.

Regarding to years of work experience the current study cleared that there was statistically significant relation between nurses emotional intelligence and their years of experience and this result reminded that the most of nurses with more than five years of experience had a better ability to recognize and express their feelings and better management over their emotions, This may be due to that years of work experience enhanced and improved their communication skills with psychiatric patient as well as enhance their personal abilities of

emotional intelligence such as self-awareness, regulation of emotion and social skills

In the same line this result is identical with **Tomar, (2016)** studied in which he examined the effect of types of hospitals and length of service on emotional intelligence of nurses, The study reported that the level of emotional intelligence in the nurses who are working above nine years have significantly higher level of emotional intelligence as compared to other

While, this result contradicts to study carried by **Wilson, (2015)**, who studied the awareness of emotional intelligence by nurses and support workers in an acute hospital setting, asserted that there were no significant differences between nurse's emotional intelligence and years of job experience and reported, also that people's emotional intelligence does not seem to increase as their work experience increases.

Regarding to years of marital status, the current study results illustrated that there was significant difference between emotional intelligence and marital status**,** this may be due to that all nurses were overwhelmed to daily life requirement additionally all nurses work under the same work environment.

This result was disagreement with **Bibi, Chaudhry & Awan, (2015)** in their study about influence of marital status on emotional intelligence, As they mentioned that the result of study found no significant relationship between marital status and emotional intelligence, besides this study was agree with **Konstantinou, & et al. (2017)** in their study to examine emotional intelligence and its impact on the emotional factors among nurses, who found that there was significant difference between (EI) and marital status.

Conclusion

Based on findings of the present study, it can be concluded that:

The present study clarified that, about more than half of the nurses have low level of total emotional intelligence.

The highest mean of emotional intelligence domain among the studied sample of nurses was social skills domain, which Self-awareness, empathy, managing emotions and the low mean was self-motivation

There is a highly statistically significant difference between socio- demographic (marital status, year of experience and level of education) regarding the levels of emotional intelligence but anther items there is no statistically significant difference.

Recommendation

In the light of the study results and the foregoing conclusions, the following is recommended:

➢ Hospital should provide continuous training program to nursing staff to enhance their skills regarding emotional intelligence.

➢ Nursing emotional intelligence skills should be included in curriculum of Nursing educations undergraduate and post-graduate curricula.

➢ More of future research is suggested to examine the effect of emotional intelligence training on nurses' outcomes.

➢ Staff development and continuing nursing education activities are strongly recommended to improve nurses' emotional intelligence. This could be in the form of: On-the-job training courses and Seminars and workshops.

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