Correlation Between Emotional Intelligence and Job Burnout Among Nurses Caring For Geriatric Patients

Magda A. Elmarakby [(1)], Hoda A. El Guindy [(2)], & Sheren El Sayed Shrief [(3)]

(1) (B.Sc. Nursing).

(2) Assistant Professor of Nursing Administration, Vice dean of education and students' affairs, Faculty of Nursing Beni-Suef University.

(3) Assistant Professor of Medical Surgical Nursing, & Head of department, Faculty of Nursing, Beni-Suef University

Corresponding author: Magda Attia Abd-Elkawy Elmarakby, Master's student at faculty of nursing, Beni-suef university, Alexandria, Egypt. **Magda77616663@gmail.com**

Abstract

Background: Emotional Intelligence (EI) is the ability to recognize, understand, and control one's own emotions in order to reduce stress, communicate effectively, sympathize with others, overcome obstacles, and diffuse conflict. Job burnout, on the other hand, is a state in which a person is physically and intellectually overworked, as well as having emotional components that lead to sadness at work. **Aim of the study:** Assessment of Correlation between Emotional Intelligence and Job Burnout among Nurses Caring for Geriatric Patients in Beni-Suef University Hospital through the following objectives:

1. Assessing Emotional Intelligence level among Nurses Caring for Geriatric Patients in Beni-Suef University Hospital
2. Assessing Job Burnout level among Nurses Caring for Geriatric Patients in Beni-Suef University Hospital
3. Explore correlation between Emotional Intelligence and Job Burnout among Nurses Caring for Geriatric Patients in Beni-Suef University Hospital

Methods: **Design**: descriptive correlation was used. **Sample:** A convenience sample of 140 nurses working at Beni-Suef university hospital. **Setting:** this study was conducted at Beni-Suef university hospital, at all departments for long term geriatric patients **Tools:** two main tools were used to conduct this study **Tool I:** Emotional Intelligence scale which consists of two parts: part (1) nursing demographic data and job characteristic, part (2) Emotional intelligence scale. **Tool II:** Job Burnout Questionnaire. **Results**: less than fifth of the nurses in the study sample (18.6%) had high total EI, it ranged between 15.7% for sociability and 18.6% for wellbeing. And the nurses' study sample was almost equally split between low (50.7%) and moderate\High (49.3%) total burnout. **Conclusion**: there was a statistically significant negative correlation between burnout scores and emotional intelligence scores. **Recommendations:** Programs of In-service training for nurses on EI skills are recommended. Periodic screening of emotional distress, exhaustion, decrease job satisfaction, professional inefficiency, and social negative effects.

Keywords: Emotional Intelligence, Job Burnout, nursing caring for geriatric patients.

Introduction

"Emotional Intelligence (EI) is a series of non-cognitive, competent, and skills that affect the ability of individuals to successfully respond to environmental needs and pressures". Bar-On further described EI as a social capability that affects a number of emotional capabilities and influenced environmental requirements **(Cejudo, J. et al., 2018)**.

Meanwhile, the view of EI has been improved and enriched as a cognitive emotion used to enhance cognitive activities, along with the ability to solve problems and difficulties through, knowledge usage **(Aktaş, H. 2016)**.

Some of the main domains of EI are social awareness, relationship management, self-management, and self-awareness. The characteristics of Nightingale in terms of the four domains of EI. **(Ranasinghe, P. et al.,**

2020). As El also encompasses characteristics, such as motivation and determination, studies indicate that it is a strong indicator of career success **(Urquijo, Extremera, & Azanza. 2019)**. Furthermore, EI can improve performance in four areas, self-awareness (the capability to properly perceive own emotions in the present and to observe own tendencies across contexts), social awareness (knowledge than others, and understanding one's abilities, and empathy), self-management, and management of relationship **(Drigas, A., & Papoutsi, C. 2018)**.

Around the world, the shortage of qualified nurses is one of the critical challenges in the field of healthcare. Owing to the nature of work, nursing is a high-stress occupation; there is direct exposure to different kinds of working environments and conditions which result in anxiety and depression **(Mérida-López, S., et al., 2019)**. This shortage is a multidimensional phenomenon and can be attributed to low job satisfaction, lack of managerial support, poor career opportunities, etc. **(Ishii, S., & Horikawa, E. 2019)**.

Presently, a large proportion of professionals suffer from overload at work, pressure in time, and face-to-face stress when interacting with clients features which often lead to strong chronic distress that could develop into what is known as Burnout Syndrome **(Cohen, A., & Diamant, A. 2017)**. Burnout is described as a log-term response to chronic emotional and interpersonal stressors related to work. It is divided into three dimensions: Exhaustion, cynicism and reduced professional efficacy **(Aronsson, G., et al., 2017)**.

Work engagement measures the individual's desire to reach the job's goals, which is a source of personal satisfaction; *mental exhaustion* refers to emotional and physical exhaustion resulting from having daily contacts at work who give rise to problems; *apathy* is the presence of negative behaviors of indifference and cynicism towards clients, while guilt refers to guilt feelings due to negative behavior at work **(Guerrero-Barona, E., et al., 2020)**.

There is ample evidence showing that burnout is costly for both individuals and organizations: it affects workers' well-being, decreases job performance, and increases absenteeism and the desire to quit the job. Most of research on burnout that has been conducted in the nursing profession and human services, have been described as particularly prone to burnout **(Szczygiel, D. & Mikolajczak, M. 2018).**

Significance of this study

With life expectancy increasing, the numbers of elder people are similarly increasing, with a higher workload on geriatric health care services, and consequently more burnout and stress among providers, especially nurses. Attention should be given to the factors that may alleviate the adverse effects of such stressors and the negative emotions on job burnout. Hence, this study is an attempt to interpret the strength of the association between burnout and EI among geriatric nurses.

Aim of the study:

Assessment of Correlation between Emotional Intelligence and Job Burnout among Nurses Caring for Geriatric Patients in Beni-Suef University Hospital through the following objectives:

1. Assessing Emotional Intelligence level among Nurses Caring for Geriatric Patients in Beni-Suef University Hospital

2. Assessing Job Burnout level among Nurses Caring for Geriatric Patients in Beni-Suef University Hospital

3. Explore correlation between Emotional Intelligence and Job Burnout among Nurses Caring for Geriatric Patients in Beni-Suef University Hospital

Research Question:

1. What is Emotional Intelligence level among Nurses Caring for Geriatric Patients in Beni-Suef University Hospital?

2. What is Job Burnout level among Nurses Caring for Geriatric Patients in Beni-Suef University Hospital?

3. Is there correlation between Emotional Intelligence and Job Burnout among Nurses Caring for Geriatric Patients in Beni-Suef University Hospital?

Subjects & Methods:

Research Design: A descriptive correlation design was used.

Study Setting: The study was conducted in Beni-Suef University Hospital. Which is a hospital in Egypt Beni-Suef, it was established in 1995 and currently has a capacity of 472 total beds. Moreover, it consists of 16 main departments and 11 unit that provide multi services. In addition to that, it's a seven-floor building, where each floor includes different departments such as ICU, cardiothoracic, surgical unit and others.

Study Subjects:

The sample size was calculated to demonstrate a correlation coefficient of 0.25 or higher with 80% power and at a 95% level of confidence between the score of El and burnout. Using the Open-Epi software package for sample size estimation for correlation, the required sample size is 123. This was increased to 140 to account for a nonresponse rate of about l0%. All nurses in the study settings were contained within the sampling population. A convenience sampling technique was used in recruiting the nurses in the study sample according to the inclusion criterion as providing care for elderly and having at least one-year experience in the setting.

Data collection tool: The data collection tool consisted of a self-administered questionnaire including two scales, namely El and burnout scales. The questionnaire included the following parts.

Part I: Demographic and job characteristics: Covered personal data such as age, gender, nursing qualification, years of experience, marital status, residence, and income, as well as data about previous attendance of related training courses.

Part II: Trait Emotional Intelligence Que~Sho1t Form: El scale. This scale was developed by **Petrides (2009) (Petrides, K. V., & Mavroveli, S. 2020).** It consists of 30 statements measuring 15 dimensions of E1. The statements are scored on seven Point scale from 'completely agree' to 'completely disagree. Of these, 26 items are categorized into four main domains, and the four

remaining items are used in the total global score as following:

Self-control (6 items): such as ''1 tend to change my mind frequently"; **Emotionality (8 items);** such as "I am normally able "get into someone's chose" and experience their emotions"; **Sociability (6 items):** such as "I can deal effectively with people"; and **Wellbeing (6 items):** such as "I generally don 't find life enjoyable"

Scoring: The responses on the seven-point scale from 'completely agree' to 'completely disagree' were scored from "l" to "7." The negative statements were reverse scored according to the instructions of the tool manual so that a higher score indicates higher emotional intelligence. For categorical ana1yses, the scores of each domain and of the total scale were converted into percent scores. A percent score <60%iwas low, 60-<75%+ considered moderate, and 75%+ considered high. For statistical efficiency, the moderate and high categories were joined together.

Part III: **Maslach Burnout Inventory (MBI):** This scale consisting of 22 statements was developed by **Maslach et al. (1996) (Cassano, F., et al., 2020)** to evaluate burnout. 'These responses on Six-point scale from 'never' to; every day.' The statements are categorized into three factors as following: **Emotional exhaustion** burnout (7 items): such as "I feel frustrated from my work."; **Depersonalization burnout** (7 items): such as "I really do not care about what happens to patients."; and **Personal achievement burnout**: (8 items): such as ''I care about my patients' problems very effectively."

Scoring: The responses on the six-point scale from 'never' to 'every day' were scored from "l" to "6." The positive statements in the personal achievement domain were reverse scored so that a higher score indicates higher level of burnout. For categorical analyses, the scores of each domain and of the total scale were converted into percent scores. A percent score <60 considered low burnout, 60-<75% considered moderate burnout, and 75%+ Considered high burnout. To statistical efficiency, the moderate and high categories were joined together.

Validity and Reliability of the tool: The researcher utilized standardized tools with documented validity and reliability **(Petrides, 2009; Maslach et al., 1996).** They were translated into Arabic using the translate-back-translate method to ensure its validity. Moreover, a panel of three experts in nursing administration, community and geriatric health nursing reviewed the Arabic version for relevance, comprehensiveness, understanding, applicability, ease of administration. The tool was finalized based on their and suggestion, which were minor. The reliability of the scales was assessed through testing their internal consistency. They mostly demonstrated good level of reability as shown below.

Scales	No of Items	Cronbach's Alpha
Emotional intelligence	30	0.74
Burnout	22	0.66

Pilot Study: The pilot study was carried out on 10% of the sample size to evaluate the clarity of the statements, feasibility of the study, suitability of the setting, and availability of study subjects. It also helped to determine the approximate time needed for the data collection. The pilot sample was included in the main study sample as no changes were needed in the data collection tools.

Fieldwork: After getting all necessary official permissions, the researcher visited the study settings and met the persons in charger to determine the proper time and collection. Then, she met with the nurses individually to explain the study aim and the procedure of data collection. Eligible nurses were invented to participate.

The nurses who gave their verbal consent to participate were given the data collection form and were instructed in how to fill it, they were asked to fill-in the questionnaires at the workplace. The researcher was present all the time to respond to any queries. Then, then the completed forms were collected and checked for completeness. The data collection process was done 2 days per week from am to 9 am to 8 pm. The fieldwork lasted for 3 months from March 2020 to May 2020.

III. Administrative Design:

An official permission was obtained from authorized personnel in the study settings. This was through official letters addressed from the Dean of the Faculty of Nursing, Beni-Suef University to the medical and nursing directors of the study hospitals clarifying the aim of the study along with a copy of the data collection form.

Ethical considerations

Before study conduction the protocol was approved by the scientific research, committee of the Faculty of Nursing, Beni-Suef University. A verbal informed consent for participation was obtained from each nurse after full explanation of the study aim and its procedures. As well as their rights to refuse participation or Withdraw at any stage of the data collection. Also, they reassured that the information will be confidential and used only for the research purpose.

IV. Statistical Design

Data entry and statistical analysis were done using SPSS 20.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables and means and standard deviations and medians for quantitative variables. Cronbaeh alpha coefficient was calculated to assess the reliability of the scales used through their internal consistency. Quantitative continuous data were compared using Student t-test in case of comparisons between two independent groups. Qualitative categorical variables were compared chi-square test. Whenever the expected values in one or more of the cells in a 2x2 tables was less than 5, Fisher exact test was instead. Spearman rank correlation was used for assessment of the inter-relationships a": quantitative variables and ranked ones. In order to identify the independent predictors of the El and burnout scores, multiple linear regression analysis was used and analysis of Variance for the full regression models was done. Statistical significance, was considered at p—value **<0.05**

Results

The study sample included 140 nurses with age range between 20 and 57 years, median 30.0

years as presented in Table 1. The great majority were female (88.6%) diploma degree (80.7%), married nurses (72.9%). Their experience ranged from 1 to 39 years, median 7.0 years. Slightly more than a half (56.4%) had rural residence, and 73.6% reported having sufficient income.

Concerning training courses, figure 1 shows that slightly less than two-thirds of the nurses (61.4%) were attended geriatric care training course. About one third for burnout (32.1), other hand, only one fives 21.4% were attending training courses in emotional intelligence.

Table 2 indicate very low percentage of high EI among nurses in the study sample, it was 15.7% for sociability and 18.6% for wellbeing, and (17.1%) for both self-control and emotionality. And the percentage for those low in Total EI was (81.4%).

As regards burnout, Table 3 indicates that there was a percentage of low emotional exhaustion percentage of 37.9%, low depersonalization of 5.7%, low achievement burnout of 22.1%, and low Total burnout of 50.7%.

Similarly, Table 4 points to no statistically significant relations could be revealed between nurses' emotional intelligence emotionality domain and nurses' demographic characteristics. Although more nurses with low emotionally were among those who did not attend training course in EI, the difference did not reach statistical significance (p=0.12). it shows a statistically significant relation between nurses' emotional intelligence sociability and their attendance of training courses in geriatric care (p=0.03). It is evident that the percentage of nurses with low

sociability was higher among those who had attended such courses.

As for the relations between nurses' emotional exhaustion burnout and their characteristics, Table 5 indicates statistically significant relations with qualification (p=0.003) and income (p=0.02). lt can be noticed that more nurses having diploma degree and insufficient income were having moderate/high emotional exhaustion. As for the relations between nurses' total burnout and their characteristics, and it illustrates statistically significant relations with their age (p=0.007), qualification (p=0.007) and attendance of training courses in burnout (p=0.003), and in E1 (p=0.049). It is noticed that more nurses in the younger age group, having diploma degree, having attended such training courses were having moderate/ high total burnout.

Table 6 illustrates statistically significant weak to moderate positive correlation among nurses' scores of El domains. The strongest of these correlations was between the domains of social-control sociability (r=O.606).

As displayed in Table 7; only the scores of the burnout domains of emotional exhaustions .and depersonalization were statistically significantly correlated. The correlation was moderate and positive (r=0.484)

As regards the correlations between nurse's burnout and emotional intelligence scores, table 8 shows that only the achievement scores had statistically significant weak positive correlations with all emotional intelligence domains point the strongest correlation was between achievement and EI wellbeing (r=0.389).

Part 1: Demographic characteristics nurses:

Table 1: Socio-demographic characteristics of nurses in the study sample (n=140)

	Frequency	Percent
Age:		
<40	67	47.9
40+	73	52.1
Range	20.0-57.0	
Mean±SD	31.8±8.5	
Median	30.0	
Gender:		
Male	16	11.4
Female	124	88.6
Nursing qualification:		
Diploma	113	80.7
Bachelor	27	19.3
Experience years:		
<5	35	25.0
5-	50	35.7
10+	55	39.3
Range	0.0-39.0	
Mean±SD	10.5±8.6	
Median	7.0	
Marital status:		
Un-married	38	27.1
Married	102	72.9
Residence:		
Urban	61	43.6
Rural	79	56.4
Income:		
Insufficient	37	26.4
Sufficient\ Saving	103	73.6

Figure 1: Attendance of training course among nurses in the study sample (n=140)
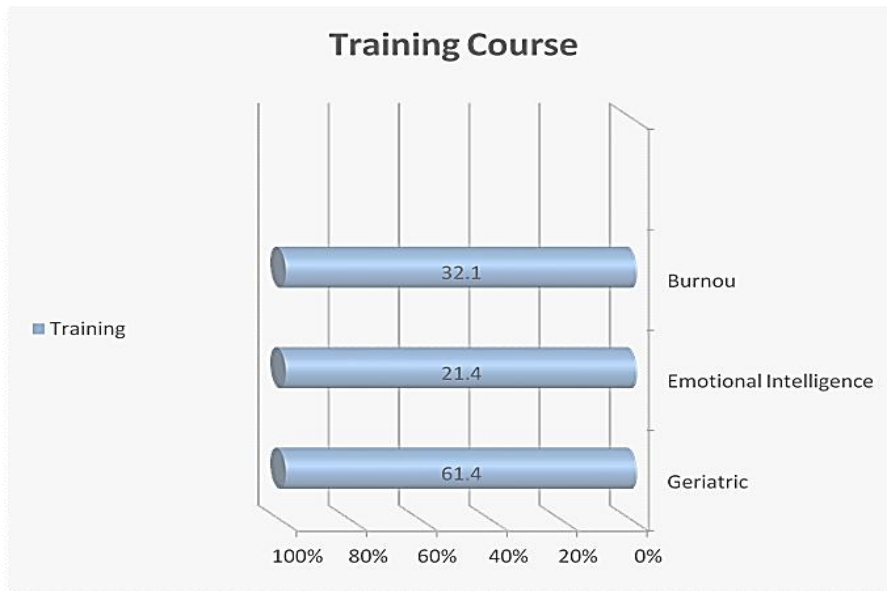
Part II: Emotional Intelligence and burnout among nurses.

Table 2: Emotional intelligence competences among nurses in the study sample (n=140)

High (60%+) emotional intelligence:	Frequency	Percent
Self-control	24	17.1
Emotionality	24	17.1
Sociability	22	15.7
Wellbeing	26	18.6
Total EI:		
Low	114	81.4
High	26	18.6

Table 3: Burnout experience among nurses in the study sample (n=140)

High (60%+) burnout:	Frequency	Percent
Emotional exhaustion:		
Low	53	37.9
Moderate \ High	87	62.1
Depersonalization:		
Low	8	5.7
Moderate/high	132	94.3
Achievement burnout:		
Low	31	22.1
Moderate/high	109	77.9
Total burnout:		
Low	71	50.7
Moderate/high	69	49.3

Part III: Relations between nurses' emotional intelligence and their characteristics:

Table 4: Relation between emotional intelligence emotionality, sociability domains and nurses' demographic characteristics:

	Emotionality				X² test	p-value	Sociability				X²test	p-value
	Low		Moderate/high				Low		Moderate/high			
	No.	%	No.	%			No.	%	No.	%		
Age: <40 40+	53 63	79.1 86.3	14 10	20.9 13.7	1.27	0.26	56 62	83.6 84.9	11 11	16.4 15.1	0.05	0.83
Gender: Male Female	15 101	93.8 81.5	1 23	6.3 18.5	Fisher	0.31	12 106	75.0 85.5	4 18	25.0 14.5	Fisher	0.28
Nursing qualification: Diploma Bachelor	94 22	83.2 81.5	19 5	16.8 18.5	Fisher	0.78	95 23	84.1 85.2	18 4	15.9 14.8	Fisher	1.00
Experience years: <5 5- 10+	31 38 47	88.6 76.0 85.5	4 12 8	11.4 24.0 14.5	2.72	0.26	28 42 48	80.0 84.0 87.3	7 8 7	20.0 16.0 12.7	0.86	0.65
Marital status: Unmarried Married	31 85	81.6 83.3	7 17	18.4 16.7	0.06	0.81	33 85	86.8 83.3	5 17	13.2 16.7	0.26	0.61
Residence: Urban Rural	48 68	78.7 86.1	13 11	21.3 13.9	1.32	0.25	49 69	80.3 87.3	12 10	19.7 12.7	1.28	0.26
Income: Insufficient Sufficient/saving	30 86	81.1 83.5	7 17	18.9 16.5	0.11	0.74	32 86	86.5 83.5	5 17	13.5 16.5	0.18	0.67
Courses attended: Geriatric care: No Yes	47 69	87.0 80.2	7 17	13.0 19.8	1.08	0.30	50 68	92.6 79.1	4 18	7.4 20.9	4.58	0.03*
Burnout: No Yes	81 35	85.3 77.8	14 10	14.7 22.2	1.20	0.27	82 36	86.3 80.0	13 9	13.7 20.0	0.92	0.34
Emotional intelligence: No Yes	94 22	85.5 73.3	16 8	14.5 26.7	2.44	0.12	94 24 56	85.5 80.0 83.6	16 6 11	14.5 20.0 16.4	Fisher	0.57

Part IV: Relations between nurses' burnout and their characteristics:

Table 5: Relation between burnout emotional exhaustion domain, total burnout and nurses' demographic characteristics

| | Emotional exhaustion | | | | X² test | p-value | total burnout | | | | X² test | p-value |
| | Low | | Moderate/high | | | | Low | | Moderate/high | | | |
	No.	%	No.	%			No.	%	No.	%		
Age: <40 40+	24 29	35.8 39.7	43 44	64.2 60.3	7.29	0.63	26 45	38.8 61.6	41 28	61.2 38.4	7.29	0.007*
Gender: Male Female	8 45	50.0 36.3	8 79	50.0 63.7	1.00	0.29	10 61	62.5 49.2	6 63	37.5 50.8	1.00	0.32
Nursing qualification: Diploma Bachelor	36 17	31.9 63.0	77 10	68.1 37.0	7.30	0.003*	51 20	45.1 74.1	62 7	54.9 25.9	7.30	0.007*
Experience years: <5 5- 10+	11 25 17	31.4 50.0 30.9	24 25 38	68.6 50.0 69.1	2.34	0.09	14 26 31	40.0 52.0 56.4	21 24 24	60.0 48.0 43.6	2.34	0.31
Marital status: Unmarried Married	11 42	28.9 41.2	27 60	71.1 58.8	1.55	0.18	16 55	42.1 53.9	22 47	57.9 46.1	1.55	0.21
Residence: Urban Rural	20 33	32.8 41.8	41 46	67.2 58.2	0.13	0.28	32 39	52.5 49.4	29 40	47.5 50.6	0.13	0.72
Income: Insufficient Sufficient/saving	8 45	21.6 43.7	29 58	78.4 56.3	2.08	0.02*	15 56	40.5 54.4	22 47	59.5 45.6	2.08	0.15
Courses attended: Geriatric care: No Yes	18 35	33.3 40.7	36 51	66.7 59.3	0.02	0.38	27 44	50.0 51.2	27 42	50.0 48.8	0.02	0.89
Burnout: No Yes	34 19	35.8 42.2	61 26	64.2 57.8	8.76	0.46	40 31	42.1 68.9	55 14	57.9 31.1	8.76	0.003*
Emotional intelligence: No Yes	39 14	35.5 46.7	71 16	64.5 53.3	3.89	0.26	51 20	46.4 66.7	59 10	53.6 33.3	3.89	0.049*

(*) Statistically significant at p<0.05

Part V: Correlates and predictors of nurses 'emotional intelligence and burnout.

Table 6: Correlation matrix of the emotional intelligence scale domains scores

| Emotional Intelligence Domains | Spearman's rank correlation coefficient | | | |
| | Emotional intelligence domains | | | |
	Self-control	Emotionality	Sociability	Wellbeing
Self-control	1.000			
Emotionality	.359**			
Sociability	.606**	.402**		
Wellbeing	.341**	.378**	.415**	1.000

(**) Statistically significant at p<0.01

Table 7: Correlation matrix of the burnout scale domains scores

| Burnout domains | Spearman's rank correlation coefficient | | |
| | Burnout domains | | |
	Emotional exhaustion	Depersonalization	Achievement
Emotional exhaustion	1.000		
Depersonalization	.484**	1.000	
Achievement exhaustion	.005	.039	1.000

(**) Statistically significant at p<0.01

Table 8: Correlation between emotional intelligence scale and burnout scale domains scores

| Emotional Intelligence Domains | Spearman's rank correlation coefficient | | |
| | Burnout domains | | |
	Emotional exhaustion	Depersonalization	Achievement
Self-control	-.057	.018	.357**
Emotionality	.018	-.080	.201*
Sociability	.007	.024	.327**
Wellbeing	.019	.078	.389**

(**) Statistically significant at p<0.01

Figure 2: Correlation between emotional intleligence and burnout scores:
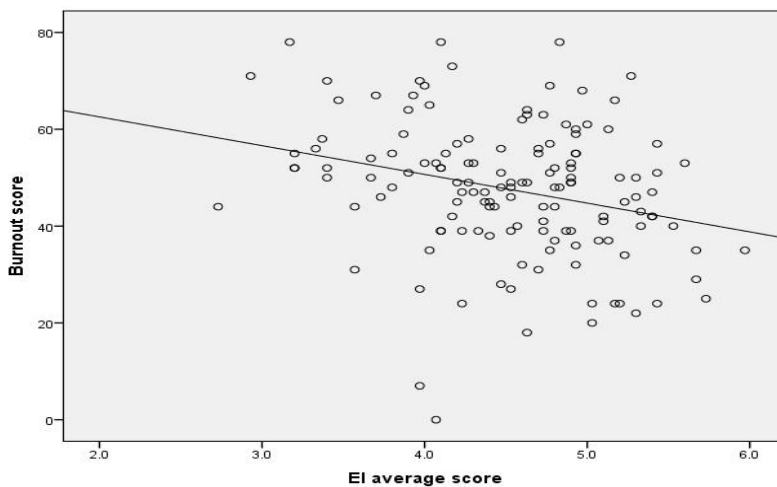
Figure 2: portorys a negative correlation between emotional intleligence and burnout scores

Discussion:

EI is an essential concept that should be kept in mind when interacting with others. Moreover, an emotionally aware nurse has the capability to work within a clear set of values within which she\he operate. Nurses have fabulous responsibilities and deal with massive challenges. According to reports, nurses are more subject to developing stress than other health care professionals. Burnout is tactlessly one of the difficulties that numerous nurses in different parts of the world are enduring today **National Nurses United (2015). (Van Bogaert, P., et al., 2017)** demonstrated that nurses may leave the profession due to occupational stress and failure to deliver nurse assessed good quality care. **The Royal College of Nursing,** revealed that in Michigan, two-fifth of nurses reported wanting to quit the nursing profession after one to 10 more years according to a 2013 report by **(the Michigan Center for Nursing , 2015)**.Burnout is described by **(Maslach and Jackson)** as a complex theory that is defined using three

characteristics: depersonalization, emotional exhaustion, and a decrease in perceived personal accomplishment **(Rogers NB 2019)**.

Burnout was determined by a sum of aggression, emotional intelligence, job stress, personality factors, and skin conductance, yet no moderation effects over time were found. Where within two years, the model roughly predicts a change in one of the burnout categories. Evidence suggests burnout symptoms in nurses may be considered an indicator to estimate absenteeism and turnover from the rise in symptoms with time.

The aim of this study was to measure the relationship between emotional intelligence and job burnout among geriatric nurses. The study findings indicate that the nurses in the study setting have low emotional intelligence and high burnout. A negative relationship was revealed between burnout and emotional intelligence.

A convenience sample of 140 nurses was recurred, their age ranged between 20 and 57 years, with a median of 30 years, four-fifth were females, this is due to most of the nursing school are often accepting female students and the faculty of nursing recently accepted male students, along with **(Mudallal, R. H., et al., 2017)** in their study carried out in Jordan who claimed that females nurses were more than half. Those married were more than three-fifth, this high percentage is due to the cultural and religious customs of the Egyptian society especially in rural areas, in harmony with **(Ashouri, E., et al., 2017)** who in their study conducted in Iran mentioned that more than half nurses were married. Our study also revealed that about half were from rural areas.

In addition, the findings indicated that about the majority have sufficient saving income as well as their median experience being of 7.0 years. It is reported that slightly under half of the nurses obtained a technical institute diploma, this is because of the secondary schools that were the main sources for nurses for many years, whereas the high nursing schools following general secondary school started opening recently. which is in contrast with **(Wang, Q., et al., 2019).** Who in their study conducted in China revealed that less than one-fifth had a technical institute diploma. About one-third had nursing school diploma, and slightly fewer than one fifth had

bachelor's degree in contrast with the study of **(Nowacka, A., et al., 2018)** conducted in Poland who in their study described those with bachelor's degree to be more than half.

Additionally, slightly less than two-thirds of the nurses had attended geriatric care training course and one third for burnout, other hand, only one fives were attending training courses in emotional intelligence.

The latest study results found that less than one-fifth show self-control, about the same show emotionality and indicate sociability, this is in agreement with the study of **(Talman, K., et al., 2019)** conducted in Finland who mentioned that a mean of 23 shows sociability, emotionality and control of self.

As regards burnout is almost evenly divided between low and moderate\High total burnout; in the analysis results indicates low to a serious burnout level in most of the nurses, the variation in the burnout levels is influenced by different aspects such as physical, psychological, cultural, social and financial issues. This is in contrast with **(Tavakoli, N., et al., 2018)** whose study stated that the job burnout percentage in nurses was about less than three-fifth moderate, about one-fifth low, and less than one-fifth high.

Additionally, the study revealed that about half participants were low in emotional exhaustion (EE), and less than one-tenth were low in depersonalization, and slightly higher than on-fifth were low in Achievement. Which is in contrast with **(Ryali, VS. et al., 2018)** who in their study indicated that more than one-fifth were low in depersonalization, whereas in nurses with low EE were about half the participants and the same percentage for low achievement, both studies shown similarity within percentage of both low achievement and EE.

Overall, we discovered a strong link between nurses' total burnout and all the El domains. It is evident in all these domains that more nurses with moderate/high total burnout were from those who were low in EI domains. The above findings were verified by **(Peter de Looffet al., 2019)** 110 forensic nursing staff members responded to questionnaires assessing their exposure to aggressive behavior, personality, emotional intelligence, and job stress during several data collection waves

over a two-year period. Analyses at several levels have been conducted to identify the possible moderation and associations factors influencing the progression of burnout symptoms.

The results are in agreement with **(Bin Dahmash, et al., 2019)** recommendation that EI training relieves burnout stressors. A significant low to moderate correlation among nurses' scores of El domains. The strongest of these relationships was between the domains of sociability, self-control (r=O.606).

The burnout scores domains of depersonalization and EE were statistically significantly correlated. The correlation was moderate and positive (r=0.484).

Study findings demonstrated a strong correlation between personal only achievement as a burnout domain and each of well-being(r=0.389), self-control (r=0.357), emotionality (r=0.201) and sociability (r=0.327). This finding is in the same line with **(Bin Dahmash, et al., 2019)** whose study indicated a correlation between achievement and each of self-control (r=0.468), well-being (r=0.370), emotionality (r=0.298) and sociability (r=0.408).

The main aim of the present study was to measure the relationship between emotional intelligence and job burnout. The results revealed that significantly higher percentages of the nurses having low emotional intelligence were having moderate to high achievement as well as total burnout. Moreover, significant negative. correlations were found between total score of emotional intelligence and each of the achievement and total burnout scores. In further confirmation, the multivariate analysis identified the emotional intelligence score as a significant independent negative predictor of the total burnout score. Thus, it could be deduced that a nurse having high emotional intelligence would be less prone to burnout.

Conclusion

Based on study findings we can conclude that:

The study results lead to the conclusion that most of the nurses in the study setting are having low emotional intelligence. Additionally, burnout is highly prevalent among them. A high level of emotional intelligence seems to alleviate the level of burnout among them. Certain nurses'

characteristics are also influential such as the level of nursing qualification, marital status, income, as well as the continuing nursing education.

Recommendation

According to the study findings, it is recommended that:

1. Geriatric nurses should have opportunities to enhance their knowledge, communication abilities &, behaviors, and skills in the form of conferences, seminars, and workshops to deal with rapidly developing burnout.

2. Nursing burnout prevention strategies and EI skills need to be part of undergraduate and post-graduate curricula.

3. Future research is suggested to examine the effect of emotional intelligence training on geriatrics care outcomes

4. 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
   - Seminars and workshops

Ethical clearance:

Taken from ethical research committee, faculty of nursing Beni-Suef university, Egypt.

Conflct of interest:

No conflict of interest

Sources of funding:

Self-funding

Referances:

Aktaş, H. (2016.). Is psychological capital a form of emotional intelligence: Research on undergraduate students. International Conference on Contemporary Issues in Education 27 - 29 May 2016 Zagreb – Croatia. Retrieved July 19, 2021, from https://www.academia.edu/42604354/Is_psychological_capital_a_form_of_emotional_intelligence_Research_on_undergraduate_students?auto=citations&from=cover_page?

Aronsson, G., Theorell, T., Grape, T., Hammarström, A., Hogstedt, C., Marteinsdottir, I., Skoog, I., Träskman-

Bendz, L., & Hall, C. (2017). A systematic review including meta-analysis of work environment and burnout symptoms. BMC Public Health, 17(1). https:// doi. org/ 10.1186/s12889-017-4153-7

Ashouri, E., Taleghani, F., & Saburi, M. (2017). Empathy, burnout, demographic variables and their relationships in oncology nurses. Iranian Journal of Nursing and Midwifery Research, 22(1), 41. https://doi. org/ 10.4103/ijnmr.ijnmr_66_16

Bin Dahmash, A., Alhadlaq, A. S., Alhujayri, A. K., Alkholaiwi, F., & Alosaimi, N. A. (2019). Emotional Intelligence and Burnout in Plastic Surgery Residents. Plastic and Reconstructive Surgery - Global Open, 7(5), e2057. https: // doi. org/ 10. 1097/ gox. 0000000000002057

Cassano, F., Tamburrano, A., Mellucci, C., Galletti, C., Damiani, G., & Laurenti, P. (2020). Evaluation of Emotional Intelligence among master's degree Students in Nursing and Midwifery: A Cross-Sectional Survey. International Journal of Environmental Research and Public Health, 17(17), 6347. https:// doi.org/10.3390/ijerph17176347

Cejudo, J., Rodrigo-Ruiz, D., López-Delgado, M., & Losada, L. (2018). Emotional Intelligence and Its Relationship with Levels of Social Anxiety and Stress in Adolescents. *International Journal of Environmental Research and Public Health*, *15*(6), 1073. https:// doi. org/ 10. 3390/ ijerph15061073

Cohen, A., & Diamant, A. (2017). The role of justice perceptions in determining counterproductive work behaviors. The International Journal of Human Resource Management, 30(20), 2901–2924. https:// doi. org/10.1080/09585192.2017.1340321

Drigas, A., & Papoutsi, C. (2018). A New Layered Model on Emotional Intelligence. Behavioral Sciences, 8(5), 45. NCBI. https://doi.org/10.3390/bs8050045

Guerrero-Barona, E., Guerrero-Molina, M., García-Gómez, A., Moreno-Manso, J. M., & García-Baamonde, M. E. (2020). Quality of Working Life, Psychosocial Factors,

Burnout Syndrome and Emotional Intelligence. International Journal of Environmental Research and Public Health, 17(24), 9550. https:// doi. org/ 10. 3390/ ijerph17249550

Ishii, S., & Horikawa, E. (2019). The Emotional Intelligence of Japanese Mental Health Nurses. Frontiers in Psychology, 10. https://doi.org/10.3389/fpsyg.2019.02004

Mérida-López, S., Bakker, A. B., & Extremera, N. (2019). How does emotional intelligence help teachers to stay engaged? Cross-validation of a moderated mediation model. Personality and Individual Differences, 151, 109393. https:// doi. org/ 10. 1016/ j. paid.2019.04.048

Mudallal, R. H., Othman, W. M., & Al Hassan, N. F. (2017). Nurses' Burnout: The Influence of Leader Empowering Behaviors, Work Conditions, and Demographic Traits. INQUIRY: The Journal of Health Care Organization, Provision, and Financing, 54(1), 004695801772494. https:// doi. org/ 10. 1177/ 0046958017724944

Nowacka, A., Piskorz, A., Wolfshaut-Wolak, R., Piątek, J., & Gniadek, A. (2018). Selected Socio-Demographic and Occupational Factors of Burnout Syndrome in Nurses Employed in Medical Facilities in Małopolska - Preliminary Results. International Journal of Environmental Research and Public Health, 15(10), 2083. https:// doi.org/10.3390/ijerph15102083

Peter de Looff, 1,2 Robert Didden,1,3 Petri Embregts4 and Henk Nijman1,2(2019): Burnout symptoms in forensic mental health nurses: Results from a longitudinal study. International Journal of Mental Health Nursing (2019) 28, 306–317 doi: 10.1111/inm.12536bs_bs_banner

Petrides, K. V., & Mavroveli, S. (2020). Theory and Applications of Trait Emotional Intelligence. Psychology: The Journal of the Hellenic Psychological Society, 23(1), 24. https://doi.org/10.12681/psy_hps.23016

Ranasinghe, P., Senadeera, V., Gamage, N., Weerarathna, M. F., & Ponnamperuma, G. (2020). Temporal changes in emotional intelligence (EI) among medical

undergraduates: a 5-year follow up study. BMC Medical Education, 20(1). https:// doi. org/10.1186/s12909-020-02404-x

Rogers NB (2019): An Investigation of Burnout Experienced in Nurses Within the Hospital Setting. Int J Nurs Res Health Care: IJNHR-164. DOI: 10.29011/ IJNHR-164. 100064.Volume 2019; Issue 01.

Ryali, VS. S. R., Sreelatha, P., & Premlal, L. (2018). Burnout and coping strategies among residents of a private medical college in South India: A cross-sectional study. Industrial Psychiatry Journal, 27(2), 213. https://doi.org/10.4103/ipj.ipj_53_18

Szczygiel, D. D., & Mikolajczak, M. (2018). Emotional Intelligence Buffers the Effects of Negative Emotions on Job Burnout in Nursing. Frontiers in Psychology, 9. https://doi.org/10.3389/fpsyg.2018.02649

Talman, K., Hupli, M., Rankin, R., Engblom, J., & Haavisto, E. (2019). Emotional intelligence of nursing applicants and factors related to it: A cross-sectional study. Nurse Education Today, 104271. https://doi.org/10.1016/j.nedt.2019.104271

Tavakoli, N., Shaker, S. H., Soltani, S., Abbasi, M., Amini, M., Tahmasebi, A., & Hosseini Kasnavieh, S. M. (2018). Job Burnout, Stress, and Satisfaction among Emergency Nursing Staff after Health System Transformation Plan in Iran. Emergency (Tehran, Iran), 6(1), e41.

Urquijo, Extremera, & Azanza. (2019). The Contribution of Emotional Intelligence to Career Success: Beyond Personality Traits. International Journal of Environmental Research and Public Health, 16(23), 4809. https://doi.org/10.3390/ijerph16234809

Van Bogaert, P., Peremans, L., Van Heusden, D., Verspuy, M., Kureckova, V., Van de Cruys, Z., & Franck, E. (2017). Predictors of burnout, work engagement and nurse reported job outcomes and quality of care: a mixed method study. BMC Nursing, 16(1). https://doi.org/10.1186/s12912-016-0200-4

Wang, Q., Lv, W., Qian, R., & Zhang, Y. (2019). Job burnout and quality of working life among Chinese nurses: A cross-sectional study. Journal of Nursing Management, 27(8), 1835–1844. https:// doi. org/ 10. 1111/ jonm.12884.