

Studying the Relationship between Alexithymia and Job Burnout in Nurses

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Abstract

Alexithymia and job burnout can be risk factors for creating stress in nurses. The current study aimed to investigate the relationship between Alexithymia and job burnout in nurses. In this descriptive-correlational study, the samples included 311 working nurses who were included in the study through the method of quota sampling. The data collection tool includes a two-part questionnaire. The first part was associated with demographic information and the second part was associated with the Alexithymia assessment questionnaire and burnout questionnaire. The data were statistically analyzed by SPSS version 23 software and through independent t-tests, Pearson correlation analysis, one-way linear regression, one-way analysis of variance, and Scheffe's post hoc test. The results of the research showed that the average score of Alexithymia and job burnout in nurses is higher than the average score and also alexithymia and job burnout are significantly correlated ($r=0.57$). The findings revealed that Alexithymia explains 33% of the changes in job burnout in nurses. In general, it can be acknowledged that the higher level of Alexithymia in a person causes the person to be weak in recognizing and describing his emotions and feelings and will suffer more from burnout syndrome. Therefore, it is recommended to know the emotional state of nurses and provide necessary training on emotion management and how to prevent and deal with burnout.

Keywords: Nurses, Alexithymia, Job burnout, Stress

Introduction

Nursing is one of the most stressful jobs in the world, and the most important stressful factors include the following: low salaries, lack of staff, poor work environment, heavy workload, and the need to deal with patients [1]. Research has shown that working with mental pressure and stressful work environments increases absenteeism, tardiness, the desire to leave the job, and as a result burnout and dissatisfaction [2-5].

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Burnout is a psychological syndrome consisting of three axes: depersonalization, emotional exhaustion, and feelings of personal inadequacy [6, 7]. Job burnout has complications such as chronic fatigue, sleep disorders, various physical symptoms, negative and pessimistic attitudes towards colleagues and clients, guilt, decreased job performance, and the like, which ultimately lead to poor patient care and an increase in the incidence of it becomes medical errors [8-10].

Some studies have shown that the rate of Alexithymia is especially high among nurses. A study of 496 nurses in China reported the rate of Alexithymia at 26% [11, 12]. Alexithymia, by definition, is a personality trait specified by a poor ability to recognize and express emotions [13-15]. People with Alexithymia cannot appropriately manage and regulate their emotions and usually express them through destructive non-verbal behaviors such as breaking things, crying, drinking alcohol, and abusing drugs [16]. Research has shown that Alexithymia, in addition to the negative effects it has on psychological well-being and emotions, is a risk factor for people suffering from psychological problems, emotional distress, blood pressure, irritable bowel syndrome, self-harming behaviors, anorexia nervosa, and various mood disorders. Also, Alexithymia has a direct relationship with anxiety, depression, and physical diseases [17, 18]. Providing services in the nursing profession requires having a high level of health and establishing an effective relationship with others, which Alexithymia can cause problems in understanding and identifying the feelings of others [19-21].

There have been limited studies on the relationship between burnout and Alexithymia in nurses. Thus, this study was done to determine the relationship between job burnout and Alexithymia in working nurses.

Materials and Methods

The current study is descriptive-correlational research that was done on 311 working nurses. The samples were selected by the quota sampling method and considering the different numbers of nurses in the studied hospitals, the ratio of the sample size was determined.

The criteria for entering the research included nurses with at least a BSc degree in nursing and at least 2 years of work experience, and the criteria for exclusion from the study was incomplete completion of the questionnaire. Nurses who met the inclusion criteria entered the study after explaining the objectives of the study and the method of conducting the study and obtaining informed consent.

The Toronto Alexithymia Assessment Questionnaire was developed by Bagby *et al.* in 1994. A 20-question test that includes three subtests: difficulty in recognizing emotions, difficulty in describing emotions, and externally oriented thinking. The subscale of difficulty in recognizing emotions is calculated based on questions 1, 3, 6, 7, 9, 13, and 14. The subscale of difficulty in describing feelings is assessed based on questions 2, 4, 11, 12, and 17, and the subscale of externally oriented thinking is assessed based on questions 5, 8, 10, 15, 16, 18, 19, and 20. The scoring of the questionnaire is based on a 5-point Likert scale (from 1 for completely disagree to 5 for completely agree). The reliability of this questionnaire was reported by Bagby *et al.* [22] based on Cronbach's alpha coefficient of 0.81 and based on the retest coefficient of 0.77. It should be noted that the psychometric characteristics of this questionnaire have been approved in several studies [23].

The job burnout questionnaire by Maslach *et al.* [24] and has 22 items. This questionnaire evaluates the overall burnout and its three components, which include emotional exhaustion, and personal inadequacy. Maslach and Jackson to determine the validity of the questionnaire have used the following methods: 1. Calculating the correlation of people's score in the present questionnaire with the score given by someone completely familiar with the person, 2. Calculating the correlation of job experience dimensions with job burnout, 3. Calculating the correlation of people's scores in this questionnaire and Various outcomes that are assumed to be related to burnout. The validity of this questionnaire is reported using Cronbach's alpha coefficient of 71% to 90% and its reliability coefficient is 60% to 80% Internal Cronbach's alpha method was used so that the Cronbach's alpha coefficient was calculated as 0.88 for the dyslexia questionnaire and 0.92 for the job burnout questionnaire.

The collected data were analyzed through descriptive and inferential statistics using SPSS version 23 software at an error level of 5%. In the descriptive statistics part, absolute and relative frequency distribution, mean, SD (standard deviation), and range of changes were used to interpret the results. In the inferential statistics section, the Kolmogorov-Smirnov test to check the data normality, the Pearson correlation test to determine the relationship between Alexithymia and job burnout, the regression test to check the effect of the Alexithymia variable, the independent t-test to compare the average of two populations, the analysis of variance test One-sided to compare the average scores of the research variables according to education, age and service experience, and the Shefa post hoc test was used to compare the research variables.

Results and Discussion

A total of 311 nurses participated in this research, the majority of them (68.49%) were female with an average age of 35-26 years (Table 1).

Table 1. Demographic information of the participants.

Demographic information		N	%
Age	< 25 years	18	5.7
	26-35 years	147	47.26
	36-45 years	123	39.54
	>46 years	23	7.5
Gender	Male	98	31.51
	Female	213	68.49
Marital status	Single	103	33.1
	Married	167	53.7
	Divorced	27	8.7
	Deceased wife	14	4.5
Level of education	BSc	199	63.98
	MSc	107	34.42
	PhD	5	1.6
Work history	≤5 years	24	7.7
	6-15 years	58	18.64
	16-25 years	192	61.86
	> 25 years	37	11.8
Employment status	Long-term contract	11	3.5
	Contractual	189	60.9
	Official	103	33.1
	Hourly	8	2.5

Based on the significance level of the Kolmogorov-Smirnov test for each of the variables of aphasia and job burnout (**Table 2**) and their normal distribution, parametric tests were utilized to analyze the data.

Table 2. The result of the normality test of the data distribution of the variable dimensions of Alexithymia and burnout.

Variable	Dimension	P-value	Error value	Conclusion
Alexithymia	Difficulty recognizing emotions	0.174	0.05	Normal
	Difficulty describing feelings	0.154	0.05	Normal
	Objective thinking	0.167	0.05	Normal
Job Burnout	Individual performance	0.164	0.05	Normal
	Disfigurement	0.135	0.05	Normal
	Emotional exhaustion	0.171	0.05	Normal

The average scores of Alexithymia and burnout were 2.81 and 4.119, respectively (**Table 3**). In examining the dimensions of Alexithymia, the highest score was related to the dimension of difficulty in describing emotions with a score of 91.7, and in examining the dimensions of job burnout, the highest score was related to the dimension of emotional exhaustion with an average score of 48.3.

Table 3. The level of Alexithymia, burnout and their dimensions in nurses.

Variable	Dimension	Score	Level	Total average
Alexithymia	Difficulty recognizing emotions	88.3	Above average	81.2
	Difficulty describing feelings	91.7	Above average	
	Objective thinking	63.5	Relatively low	
Job Burnout	Individual performance	15.7	Relatively average	119.4
	Disfigurement	27.4	relatively high	
	Emotional exhaustion	48.3	high level	

The results obtained from the Pearson correlation test between the variables of aphasia and job burnout indicate that these two are related at a significant level ($P < 0.01$). The correlation intensity of the relationship between two variables is positive ($r = 0.57$) and in terms of intensity, this relationship was reported to be strong ($\alpha = 0.05$). Considering the rule of regression assumptions (normality of data, independence of errors, and normality of distribution of errors with zero mean), a regression test was utilized to investigate the effect of the Alexithymia variable on nurses' burnout. The regression results are presented in **Table 4**.

Table 4. Regression model between Alexithymia and burnout of nurses.

Variable	Non-standard coefficients (B)	Standard error	Standard coefficients (β)	t statistic	Sig.	The result of the model
Constant value	1.18	0.14	-	8.25	0.00	-
Alexithymia	0.62	0.05	0.57	13.64	0.00	It is effective
Durbin-Watson statistic	1.97	The errors in the model are not correlated				
Adjusted coefficient of determination	0.33	33% of nurses' burnout changes are explained by Alexithymia				
Fisher's F significance level	0.00	The linear relationship of the model is accepted				
Result	Alexithymia has a direct and positive relationship with nurses' job burnout					

According to **Table 4**, the value of Fisher's F significance level is equal to 0.00, which is less than 0.05 and indicates the existence of a linear relationship between Alexithymia and burnout of nurses. According to the table of the significance level of the model, the regression is equal to 0.00, which is less than the value of 0.05 and shows that the Alexithymia variable is related to nurses' burnout. The adjusted coefficient value is equal to 0.33 and it indicates that the variable of dyslexia explains 33% of the changes in job burnout of nurses. The effect of the Alexithymia variable on nurses' burnout according to the standard path coefficient (β) is equal to 0.57, which shows that for one unit increase in Alexithymia, nurses' burnout increases by 0.57 units. Therefore, the main hypothesis of the research is confirmed with 99% confidence and Alexithymia affects nurses' burnout.

The current study was done to determine the relationship between job burnout and Alexithymia in working nurses. The findings showed that as burnout increases, Alexithymia increases in the same direction.

According to the findings of the current study, the level of Alexithymia in working nurses is more than average and at a relatively high level. In the study of Korkmaz *et al.* [12], the rate of Alexithymia was 46.22. Pie *et al.* [11] in their study to determine the rate of Alexithymia, depression, social support, and burnout among emergency nurses in China, reported the rate of Alexithymia to be 53.26. These results show that Alexithymia is a common problem in nursing. The result of estimating the average of the respondents in the dimensions of Alexithymia indicates that the degree of difficulty in recognizing feelings and the difficulty in describing the feelings of nurses to each other is at a high level, and the objective thinking of nurses is at a relatively low level. The functional concept of people suffering from Alexithymia refers to the fact that people have difficulty in describing and expressing their emotions and differentiating emotions from their manifestation and behavior (lack of distinction between emotion and behavior) and its mental concept refers to the lack of recognition of their feelings and emotions. And people have an unhelpful thinking style. People with Alexithymia face many problems in physical, psychological, social, and interpersonal dimensions. In explaining the results obtained, it can be said that people with Alexithymia have an interpersonal style characterized by coldness, distance, and distancing and avoiding others. The higher the level of Alexithymia, the more insecure attachment style people have. Here too, the more a person has difficulty describing his feelings and emotions, and the more weak he is in recognizing emotions and has low objective thinking, the higher the level of Alexithymia disorder. It will be that the reverse of this case is also true.

The level of job burnout in nurses in the present study was higher than the average scores. The results obtained according to the dimensions show that emotional exhaustion and depersonalization in the studied society are at a high level, and then individual performance is at a relatively moderate level. Burnout is defined as psychological symptoms including emotional exhaustion, negative attitude in response to others, and personal failure. Therefore, a person who feels exhausted and chronically tired has an aggressive mood and has become somewhat suspicious and pessimistic in interpersonal relationships, the person has experienced job burnout. Here, according to the level of any type of depersonalization after emotional exhaustion, it has been observed that depersonalization is a direct response to stress, negative emotions, and job adversities. Finally, the individual's performance dimension refers to the feeling of sufficiency and successful progress in the work, the professional efforts of the individual, and the more negative impressions a person has and feels that he is not progressing in his job, the more he has suffered from job burnout. Alexithymia changes and job burnout are related and the intensity of this relationship is strong. The type of correlation between the two not mentioned is direct (positive) and the higher the Alexithymia, the

higher the job burnout. The results of Pie *et al.*'s study [11] also determined that Alexithymia has a direct and significant correlation with high burnout levels.

In this study, levels of job burnout and Alexithymia were related to some demographic characteristics, including age, sex, level of education, and work experience in nursing. Alexithymia was more in women than men and less in nurses with less than 5 years of experience. Alexithymia was more favorable in nurses with a doctorate than with a master's or bachelor's degree. No significant relationship was reported between alexia and the age of nurses. Some studies support the results of this study. Sancar and Aktas, in a study that aimed to specify the relationship between Alexithymia and communication skills in Turkish nursing students, did not find a relationship between Alexithymia and age [19]. Also, some other studies did not report the level of Alexithymia and demographic characteristics including age, level of education, and communication work history [25, 26].

In Dall'Or *et al.*'s review study on burnout in nursing conducted in 2020, 87 articles on burnout in nursing were reviewed. The findings showed that nurses with a younger age and a bachelor's degree had more job burnout, which is consistent with the results of this study [27].

Conclusion

The results of this research showed that the rate of Alexithymia and burnout in working nurses is higher than average. Also, the level of Alexithymia and job burnout in nurses had a direct relationship, so the higher the level of alexithymia in a person, the higher the level of job burnout. Considering the importance of the nursing profession and caring for patients, it is therefore suggested that, while knowing the emotional state of nurses, necessary training should be provided regarding emotional management and how to prevent and deal with job burnout. Psychological therapists can help increase nurses' awareness of emotional states and how to control them by offering solutions such as holding self-knowledge courses and psychological workshops. Also, by using efficient management methods, nursing managers can provide suitable working conditions for nurses to perform multiple roles while improving the conditions and mental/emotional condition of nurses.

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