

Studying the Relationship between Patients' Satisfaction and Mental Well-Being of Nurses with the Job Burnout Mediating Role

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Abstract

One of the most important goals of healthcare managers is to improve patient satisfaction. Patient satisfaction is the state of interaction between the service recipient and health care professionals, in which nurses have a special role. The current study was done to investigate the relationship between patients' satisfaction and mental well-being (feeling of well-being) of nurses with the mediating role of job burnout. This study is a descriptive-correlation study and its statistical population includes 2602 hospital nurses. Among these people, 335 people were selected using Cochran's formula and available sampling method. Mental well-being, job burnout (MBI), and patient satisfaction (PSI) questionnaires were used to collect data. To analyze the data in this research, the structural equation modeling method was used using Laserl version 8.8 software, and also to analyze Data, SPSS version 23 software. The results obtained from this study showed that mental well-being affects patients' satisfaction indirectly ($\beta=0.44$) and directly ($\beta=0.04$) and with the mediating role of job burnout (in total $\beta=0.84$). Also, job burnout is effective on patient satisfaction ($\beta=0.62$) and mental well-being is effective on job burnout ($\beta=0.72$). According to the results obtained from this study, it can be stated that mental well-being, with the mediating role of job burnout, has a positive effect on patient satisfaction.

Keywords: Nurses, Mental well-being, Patients' satisfaction, Job burnout

Introduction

Patient satisfaction is a concept that has gained special importance in medical care today [1, 2]. The level of patients' satisfaction with hospital services plays an important role in improving the quality of its services [3, 4]. Improving the quality of care is not possible without paying attention to the opinions and expectations of patients, and generally, clients who are satisfied with the services, accept and follow the recommended treatment and call others to use those services as well [5-7].

Providing care services according to patient's needs and expectations can improve the quality of hospital services [8, 9]. The results of patients' satisfaction evaluation can show the result of the structure of the healthcare system;

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Received: 15 August 2022; **Revised:** 12 October 2022;

Accepted: 12 October 2022

How to Cite This Article: Jung OS, Aiken LH, Sloane DM, Fridkin SK, Li Y, Kang YJ, et al. Studying the Relationship between Patients' Satisfaction and Mental Well-Being of Nurses with the Job Burnout Mediating Role. *J Integr Nurs Palliat Care*. 2022;1(1):1-6.

therefore, knowing the patient's satisfaction with the services provided is necessary to understand the quality of service provided by hospitals and medical centers [1, 10, 11].

Many factors play a role in patients' satisfaction, and finally, everything that patients have in their minds and expect affects their satisfaction [12]. For example, one of the influencing factors in patient satisfaction is nurses' burnout [13, 14]. Nurses are vulnerable to cortical burnout [15]. High job stress leads to job burnout. When a person experiences high, continuous, and uncontrolled stress in the work environment; the demands of the work environment are more than the individual's ability and he cannot reach his goals, and also people who have a low tolerance threshold and are not able to deal with stress are more exposed to job burnout [16].

Job burnout is a syndrome that contains emotional and physical fatigue that causes a negative self-image, a negative attitude toward the profession, and a lack of communication with clients, and sometimes it may cause various mental and physical problems [16, 17]. Work burnout is the kind of mental burnout that is combined with mental pressures and tensions related to the job and the work environment and causes emotional fatigue, negative reactions, and a decrease in the feeling of individual success [18]; therefore, what a person's mind understands about the conditions of his work and social environment can be an influential factor in his job burnout and ultimately client satisfaction.

This is where the necessity of employees' mental well-being (feeling of well-being) is revealed. Paying attention to the mental well-being of people has gained special importance due to its direct impact on the quality of human life [19]. Mental well-being includes all the negative and positive evaluations that people make about their lives. Mental well-being includes reflective cognitive evaluations such as job satisfaction, life satisfaction, interest, and obligations, and also includes emotional reactions to life events such as sadness or happiness [20]. Mental well-being, which can be studied in the field of psychology and sociology, means how people evaluate their own lives. This evaluation may be primarily cognitive, although it may include satisfying emotional experiences or dissatisfactions. However, the levels of well-being are certainly different among different people [21]. Mental well-being is a state of well-being that includes two elements cognition and attachment [21]. Some believe that mental well-being contains four components: 1. Unpleasant emotions; 2. Pleasant emotions; 3. Judging life by measuring the state of life; 4. Satisfaction about basic issues such as marriage, health, and leisure time, and in this approach mental well-being means being happy. While concepts such as cheerfulness and satisfaction mean a feeling of happiness (hedonic approach) and show themselves in the form of happiness [20]. In this way, the feeling of vitality is related to a person's positive feelings and satisfaction with life. The conducted studies show that the vitality of positive emotions, emotional balance, and satisfaction are personality factors that have a high correlation with each other [22]. Therefore, paying attention to mental well-being such as security, job satisfaction, feeling relaxed, and reducing stress has become particularly important due to its direct effect on the quality of human life [19].

According to the presented cases and the documents that were brought in the field of variables related to the research. Patient satisfaction as an important factor that determines the quality of services provided by hospitals can be related to several variables, one of the main of which is the quality of services provided by nurses as employees who have the most contact with patients. And basically, medical services are provided to patients by this group of employees. Therefore, it is very important to pay attention to what factors improve or weaken the quality of services provided by nurses. Therefore, this study was done to investigate the relationship between patients' satisfaction and the mental well-being of nurses with the mediating role of job burnout.

Materials and Methods

The current research is a type of applied research that has been carried out in a descriptive-correlational way. The statistical population of the present study for two questionnaires of mental well-being and job burnout included 2602 nurses, of which 335 were selected as samples using Cochran's formula with an error of 5%. Also, the sample selected for the patient satisfaction questionnaire was 202 patients who were being discharged from the hospital in the offending departments, except for special, psychiatric, emergency, and children's departments, who were selected by the available sampling method. In this research, library studies and mental well-being, job burnout (MBT), and patient satisfaction (PSI) questionnaires were used to collect data. The mental well-being questionnaire has 48 items and 4 dimensions physiological needs, emotional-psychological needs, satisfaction with life, and emotional feelings. The 25-item patient satisfaction questionnaire includes dimensions of technical-professional care, trust, and patient education. The job burnout questionnaire is also 22 items that have 3 dimensions emotional exhaustion, depersonalization, and individual performance. Content validity was used to obtain the validity of research questionnaires. Thus, the questionnaires were given to several experts and professors, and after their approval, the questionnaires were distributed. Cronbach's alpha coefficient was utilized for the reliability of the research questionnaires, in such a way that the distribution and internal homogeneity of the questionnaires among 30 randomly selected samples were calculated. Cronbach's alpha coefficient for the mental well-being questionnaire was 0.87, patient satisfaction was 0.89, and job burnout was 0.85 (Table 1).

Table 1. The amount of Cronbach's alpha related to research variables.

Variables	Total alpha	Dimensions	The number of items	Alpha
Patient Satisfaction	0.89	Technical-professional care	25	0.87
		The trust		0.88
		Patient Education		0.84
Mental well-being	0.87	Physiological needs	48	0.86
		Psychological need		0.87
		Life satisfaction		0.79
		Emotional feelings		0.88
Burnout	0.85	Emotional exhaustion	22	0.81
		Disfigurement		0.85
		Individual performance		0.79

To analyze the data in this research, the structural equation modeling method was used using Lisrel software version 88, and SPSS software version 23 was used to analyze the descriptive findings.

Results and Discussion

In this part, first, the statistical description of the components of each of the research variables is mentioned in **Table 2**.

Table 2. Statistical description of mental well-being components.

Variables	Indicators	Average	Standard deviation
	Spiritual-psychological need	3.71	1.24
	Physiological needs	3.85	1.17
	Emotional feelings	3.29	1.37
	Life satisfaction	3.41	1.42
	Technical-professional care	3.57	1.49
	The total mental well-being variable	3.52	1.67
	Teaching the patient	3.39	1.32
	The trust	3.13	1.51
	Emotional exhaustion	3.65	1.32
	The total variable of patient satisfaction	3.36	1.45
	Individual performance	3.53	1.47
	Depersonalization	3.58	1.36
	The total variable of job burnout	3.55	1.57

Based on the information listed in **Table 2**, it can be said that the highest average of each component of mental well-being is related to the components of physiological needs (3.85 ± 1.17), mental-psychological needs (3.71 ± 1.24), and the lowest average is related to the component emotional feelings (3.29 ± 1.37) and life satisfaction (3.41 ± 1.42).

On the other hand, to test the theoretical model of the research and its fit with the collected data, Lisrel software version 8.8 and the maximum likelihood method were utilized to test the theoretical model and research hypotheses. To further examine the presented model, the fit indices of the general research model are given in **Table 3**.

Table 3. Fit indices of the general research model.

Indicator	The amount obtained	Acceptable domain
Chi-square ratio to degrees of freedom	4.27	<5
Chi-square	205.36	-

SRMR	0.033	<0.08
RMSEA	0.098	<10
CFI	0.95	Nearly 1
NFI	0.95	Nearly 1
RFI	0.91	Nearly 1
IFI	0.96	Nearly 1
AGFI	0.92	Nearly 1
GFI	0.91	Nearly 1

After removing the covariance errors, checking the fit indices based on the table shows that the model has a relatively good fit. The value of the RMSEA (Root Mean Square Error of Approximation) was equal to 0.098 and the SRMR (Root Mean Square Residual) was equal to 0.033, which is considered an acceptable level in model fitting. Other fit indices with values above 0.9 are considered good fit indices of the model. Also, the GFI (Goodness of Fit Index) with a rate of 0.91 and the comparative goodness of fit index (AGFI) with a rate of 0.92 confirm the model. Finally, the relationships between the implementation of the model of the coefficients of the total structures and the significance of the fulfilled parameters are shown in **Table 4**.

Table 4. Path coefficients of the effects of all structures and the significance of the estimated parameters.

Study routes	Indirect effect	Direct effect	Total effect	Test result
Mental well-being - Job burnout	-	0.72	0.72	Affect
Mental well-being - Patient satisfaction	0.44	0.40	0.84	Affect
Job burnout-Patient satisfaction	-	0.62	0.62	Affect

Patients' satisfaction with nursing services is a main indicator for evaluating the quality and way of providing services by the nursing staff, and it is considered one of the desirable achievements of the expansion of health care and medical services [14]. This study aimed to study the relationship between patients' satisfaction and the mental well-being of nurses and the mediating role of job burnout.

Descriptive findings related to the components of each of the variables showed that the highest average of the components of mental well-being is related to physiological needs. According to Fitzpatrick, who is one of the experts in mental well-being studies; a person who has the status of employment and housing is clearly in a better welfare state than a person who lacks these facilities [23]. The highest average of patient satisfaction components was related to professional technical care and the highest average of job burnout components was related to fatigue. Also, the lowest mean components for the variables of mental well-being, patient satisfaction, and job burnout were related to emotional feelings, trust, and individual performance, respectively.

Also, the fit indices of the general research model show a relatively good fit for the research model. According to the findings of this research, there is a significant relationship between mental well-being and patient satisfaction. Diner believes that subjective well-being includes all the positive and negative evaluations that people make about their lives. Mental well-being includes reflective cognitive evaluations such as job satisfaction, life satisfaction, interest, and obligations and also includes emotional reactions to life events such as sadness or happiness. Therefore, mental well-being is like an umbrella for different evaluations that people interpret based on their lives and the type of events that happen to them [20].

According to the results of this study, which indicated the existence of a relationship between mental well-being and patient satisfaction, it can be suggested that if the authorities are looking for more patient satisfaction from nursing services, they should increase the feeling of well-being among hard-working nurses. Another finding of this research was the existence of a significant relationship between mental well-being and job burnout. People spend most of their useful time in the work environment and the work environment is not free of tension. People who have a positive attitude and the ability to deal with stress not only do not consider it harmful but also use it effectively [24], so the existence of a positive attitude and mental abilities of people can reduce the level of job dissatisfaction and job burnout.

In addition, according to the findings of this research, there is a significant relationship between nurses' burnout and patients' satisfaction. This finding is in line with the research findings of Abed Ali *et al.* [13] and Vahey *et al.* [14]. In the research of these researchers, a significant relationship between job burnout and patient satisfaction has been found. The result of this finding is contrary to Rios-Risquez and Garcia Izquierdo's research [25]. That is, in his research, there was no relationship between job burnout and patient satisfaction. In general, according to the results of this research, it is suggested that policymakers and those who want to reduce burnout and the problems caused by it among nurses, and those who ultimately want to improve the quality of nurses' services and

increase patients' satisfaction should consider the mental well-being index. Nurses should pay special attention and pay attention to how to increase the mental well-being of nurses, that is, the feeling of well-being in this hard-working section of society. In addition to reducing the problems caused by job burnout such as job dissatisfaction, it will reduce mental discomfort and physical problems, and it will result in high-quality nurses' services and patient satisfaction.

Conclusion

Mental well-being, with the mediating role of job burnout, has a positive effect on patient satisfaction. Therefore, it is suggested that managers create conditions to increase mental well-being, eliminate the factors that cause job burnout, and increase patient satisfaction.

Acknowledgments: None

Conflict of Interest: None

Financial Support: None

Ethics Statement: None

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