Original Article

The relationship of mental health with resilience among psychiatric nurses

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ABSTRACT

Background & Aim: Psychiatric wards are stressful environments. Resilience can help psychiatric nurses cope with their occupational stress. The aim of the study was to examine the relationship of mental health with resilience among psychiatric nurses.

Materials & Methods: This cross-sectional descriptive-correlational study was conducted in 2017 on a sample of sixty nurses purposively recruited from all wards of Qods psychiatric hospital, Sanandaj, Iran. Study data were collected using a demographic questionnaire, the 28-item General Health Questionnaire, and the 25-item Connor-Davidson Resilience Scale. The data were analyzed via the SPSS software v. 16.0 through conducting the independent-sample t test, the one-way analysis of variance, and the multiple linear regression analysis. The level of significance was set at less than 0.05.

Results: In total, sixty psychiatric nurses (34 males and 26 females) with a mean age of 33.23±5.45 participated in this study. The mean scores of their mental health and resilience were 57.35±11.12 and 63.9±14.05, respectively. Resilience had significant relationships with age (0.025), marital status (P = 0.013), and work shift (P = 0.005). Moreover, among the subscales of mental health, only the mean score of the anxiety and insomnia subscale had significant relationship with resilience, so that each one point increase in the mean score of this subscale was associated with a 1.029-point increase in the mean score of resilience (P = 0.036).

Conclusion: Psychiatric nurses' resilience can be promoted through managing their stress and promoting their mental health.

Introduction

Working in healthcare professions, including nursing, is associated with high levels of stress (1, 2). Around 93% of nurses are exposed to occupational stressors. These stressors can negatively affect their physical and mental health (3). Psychiatric nurses are at greater risk for experiencing stress because they work in direct contact with psychiatric patients in the highly stressful environment and the difficult work conditions of psychiatric hospitals (3, 4, 35). Such stress brings them different physical, mental, and behavioral problems such as boredom, fatigue, and reduced effectiveness (1). These problems, in turn, can reduce the quality of their nursing care services and hence, negatively affect patient outcomes (16).

Resilience is among the factors behind nurses' stress management ability and mental health. It is defined as the ability to effectively cope with threats (5) and the confidence a person has in his/her abilities to overcome tensions, employ effective coping strategies, protect his/her dignity, maintain his/her emotional stability, and use his/her personal characteristics to receive greater social support (6).

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It is considered as the opposite of vulnerability (5) and a significant factor in preventing psychiatric disorders, overcoming problems, and managing stress (7). Resilience depends on time, age, and the immediate sociocultural context (8). It is a main component and a key characteristic of mental health (8–10) so that it is considered as the capacity of a person to show mental health in situations which are perceived by others as bad situations (11). Resilience can alleviate mental and emotional problems and thereby, promote mental health (12). A study showed that higher levels of resilience among nurses were associated with greater psychological well-being (13). Another study also reported that resilience enables nurses to cope with psychological strains (14).

Despite the prevalence of stress among psychiatric nurses and the great importance of resilience to stress management, there is limited information about mental health, resilience, and their interrelationships among psychiatric nurses in Kurdistan province, Iran. Thus, this study was conducted to narrow this gap. The aim of the study was to examine the relationship of mental health with resilience among psychiatric nurses.

Methods

This was a cross-sectional descriptive-correlational study. The population of the study comprised all nurses of all wards of Qods hospital which is the only psychiatric hospital in Sanandaj, Iran. Sampling was done purposively to select sixty nurses based on the following criteria: consent for participation, bachelor's or higher degrees, work experience of more than three months in psychiatric wards, and no self-reported history of mental disorders. Three instruments were used for data collection. The first was a demographic questionnaire with items on nurses' age, gender, marital status, number of children, educational level, employment status, work experience, and work shift. The second instrument was the General Health Questionnaire which was used for mental health assessment. This questionnaire consisted of four main subscales, each with seven items—28 items in total. The four subscales were somatic symptoms (items 1–7), anxiety and insomnia (items 8–14), social dysfunction (items 15–21), and depression (items 22–28). The four possible responses to each item included "Never" (scored 3), "Same as usual" (scored 2), "Better than usual" (scored 1), and "Much better than usual" (scored 0). The possible total score of the questionnaire was 0–84, where scores 0–27, 28–55, and 56–88 were interpreted as good mental health, somewhat good mental health, and poor mental health, respectively (18). The validity and reliability of the Persian version of the questionnaire had been assessed and approved in previous studies in Iran (19, 20). In this study, twenty nurses initially completed the questionnaire and its Cronbach's alpha was calculated to be 0.91. The third data collection instrument was Connor-Davidson Resilience Scale. The 25 items of this scale measured resilience on a five-point Likert-type scale, where "Completely incorrect" was scored 0, "Rarely correct" was scored 1, "Sometimes correct" was scored 2, "Often correct" was scored 3, and "Always correct" was scored 4. Thus, the total score of the scale could range from 0 to 100, which was categorized into the four levels of 0–25, 26–50, 51–75, and 76–100. People with scores greater than 60 were considered resilient (21, 22). For reliability assessment, twenty nurses completed this scale and then, Cronbach's alpha was calculated, which was equal to 0.93. After making necessary arrangements with the authorities of the study setting, a research assistant referred to the setting and distributed study instruments among the eligible participants and collected the data. Statistical data analysis was performed at a significance level of less than 0.05 using the SPSS software v. 16.0. The measures of descriptive statistics (such as mean, standard deviation, and absolute and relative frequencies) were used to summarize and present the data.

Table 1. The mean scores of participants' resilience and mental health based on their demographic characteristics

Characteristics		N (%)	Resilience Mean±SD	Mental health Mean±SD
Gender	Male	34 (56.7)	62.67±14.06	26.58±11.72
	Female	26 (43.3)	65.23 ±14.21	26.73±10.52
Marital status	Married	36 (60)	62.25±14.43	27.52±11.08
	Single	24 (40)	13.34±66.50	25.33±11.30
Educational degree	Bachelor's	53 (88.3)	63.81±14.66	26.71±11.19
	Master's	7 (11.7)	65±8.75	27.52±11.45
Employment status	Post-graduation mandatory service	11 (18.3)	65.81±9.81	26±8.24
	Under indirect contract	10 (16.7)	21.59±61.10	26.20±14.51
	Under direct contract	6 (10)	67±12.61	20.66±11.70
	Conditional official	9 (15)	55.66±8.55	30±11.66
	Permanent official	24 (40)	66.62±13.41	27.37±10.61
Work shift	Fixed	1 (28.3)	62.47±13.05	26.70±10.83
	Rotation	43 (71.7)	64.53±14.53	26.62±11.36

Table 2. Multiple linear regression analysis to examine the relationship of mental health and resilience adjusted for potential confounders

Variables		Beta	Standard error	95% confidence interval		P value
				Lower	Upper	
Constant	—	–39.502	21.397	–81.440	2.435	0.065
Subscales of mental health	Somatic	0.343	0.654	- 0.864	1.625	0.6
	Anxiety and insomnia	1.029	0.489	-0.939	1.989	0.036
	Social dysfunction	0.853	0.522	0.069	1.876	0.102
	Depression	0.541	0.510	-0.171	1.541	0.289
Age	—	1.026	0.458	-0.46	1.925	0.025
Gender	Female	5.643	3.568	-1.35	12.637	0.114
	Male (Reference)	—				
Marital status	Single	9.891	3.969	2.12	17.670	0.013
	Married (Reference)	—				
Educational degree	Bachelor's	1.033	4.094	-6.992	9.058	0.801
	Master's (Reference)	—				
Employment status	Post-graduation mandatory service	-2.655	5.468	-13.374	8.063	0.627
	Under indirect contract	-8.482	5.399	-19.064	2.1	0.116
	Under direct contract	-7.467	6.181	-19.582	4.647	0.227
	Conditional official	-7.285	5.251	-17.577	3.007	0.165
	Permanent official (Reference)	—				
Work shift	Rotation	11.161	3.956	3.407	18.915	0.005
	Fixed (Reference)	—				
R = 0.524; R² = 0.274; and R²_Adj = 0.262						

Moreover, the independent-sample *t* test, the one-way analysis of variance, and the multiple linear regression analysis were used for data analysis.

This study was approved by the Research Administration of Kurdistan University of Medical Sciences, Sanandaj, Iran (ethical approval code: IR.MUK.REC.1396.5).

Necessary permissions for entering the study setting and collecting the study data were gained from the authorities of the study setting. Participants were adequately informed about the study aims and procedures, were ensured about the confidential handling of their information, and were asked to provide written informed consent for participation. All study instruments were anonymous.

Results

Study participants were sixty nurses who were working in Qods psychiatric hospital, Sanandaj, Iran. Their age was 33.23±5.45, on average. Most participants were male (56.7%) and married (60%), had bachelor's degree (88.3%), had a work experience of less than ten years (68.3%), and worked rotation shifts (71.7%). Around 40% of them had permanent formal employment (Table 1).

The mean scores of participants' mental health and resilience were 57.35±11.12 and 63.9±14.05, respectively. Table 1 shows the mean scores of participants' mental health and resilience based on their characteristics. The total score of participants' mental health had significant positive correlation with the total score of their resilience (r= 0.567; P= 0.0001).

Multiple linear regression analysis was employed to remove the effects of potential confounders from the relationship of mental health and resilience. Accordingly, the variables of age, gender, marital status, educational level, employment status, and work shift were entered into the regression model as potential confounders. Results revealed a significant relationship between age and resilience so that each one year increase in age was associated with a 1.026-point increase in the mean score of nurses' resilience (P= 0.025). Moreover, the anxiety and insomnia subscale of mental health had a significant relationship with resilience so that each one point increase in the mean score of this subscale increased the mean score of resilience by 1.029 (P= 0.036). In addition, the mean score of resilience had significant relationships with marital status (P= 0.013) and work shift (P= 0.005) (Table 2).

Discussion

This study aimed to examine the relationship of mental health with resilience among psychiatric nurses. Participants' mean score of resilience was 63.9±14.05, denoting that they were resilient. In line with our findings, a former study reported that nurses' mean score of resilience was 75.4±15.68 and thus, they were resilient (24). However, a study reported a resilience mean score of 59.75±25.06, denoting low resilience (23). Great resilience is among the necessities of working in jobs with high levels of occupational stress such as nursing because it helps prevent physical and mental problems (25), more effectively evaluate stressful situations, and more effectively use coping strategies to cope with such situations (26).

The mean score of participants' mental health in the present study was 57.35±11.12, which implies poor mental health. Similarly, two earlier studies in Iran reported poor mental health among nurses. The mean scores of mental health in those two studies were 71.55±3.78 (16) and 56.83±11.99 (27). Because of working in stressful situations, nurses are exposed to different tensions and stressors which can physically and mentally exhaust them and cause them different health problems (28).

Study findings also indicated the significant positive relationship of mental health with resilience. In agreement with this finding, a former systematic review and meta-analysis indicated the significant relationship of mental health with resilience (29). Two other studies also reported that greater resilience was associated with better mental health and lower levels of depression, anxiety, and psychological strain (23, 30). Although we did not find any study reporting the insignificant relationship between mental health and resilience, a meta-analysis found a moderate relationship between them (31). Resilience has been reported to improve functioning, psychological well-being (32), and mental health, so that more resilient people have better mental health (33). The positive relationship of mental health with resilience can be attributed to the effects of personality traits and personal and interpersonal capabilities. Moreover, better mental health among nurses protects them against stressful situations, helps them maintain or regain

their bio-psychological balance (23), improves their health and happiness, and enables them to more effectively plan and provide patient care (34).

We also used multiple linear regression analysis to control the effects of potential confounders. Its results showed that the mean score of the anxiety and insomnia subscale of mental health had significant relationship with resilience. Similarly, an earlier study found anxiety, stress, and depression as the predictors of resilience among psychiatric nurses (35). Several other studies also reported that lower level of resilience is associated with greater levels of psychological strains (36), anxiety (36–39), depression (37, 38), physical and mental fatigue, and poor mental health (39).

Conclusion

This study shows that as a dimension of mental health, anxiety has a significant relationship with resilience among psychiatric nurses. Moreover, there is a significant positive relationship between mental health and resilience. Thus, psychiatric nurses' resilience can be promoted through managing their physical and psychological stress and promoting their mental health.

Limitations of the study

Among the limitations of the study was its small sample size which limits the generalizability of its findings.

Acknowledgement

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