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Comparative study of self-compassion and sense of coherence in nurses of psychiatric hospitals

Original Article

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Abstract: **Objective:** Nurses, due to the nature of their job, are subjected to various forms of stress and physical and psychological injuries. Self-compassion and a sense of coherence have attracted much attention in research in recent years as having high potential for improving the health and performance of people in the workplace. The present study aimed to compare self-compassion and the sense of coherence in nurses working in psychiatric hospitals and other hospitals of Kerman University of Medical Sciences.

Methods: The present study was a descriptive-comparative study of applied type conducted on 100 nurses of Shahid Beheshti Psychiatric Hospital in Kerman by the census method and 100 nurses of other hospitals of Kerman University of Medical Sciences by the stratified random sampling method. The instruments included the self-compassion questionnaire and the sense of coherence questionnaire. Data were analyzed using the Statistical Package for Social Sciences software.

Results: The results of the present study showed that self-compassion and sense of coherence were higher in psychiatric nurses (39.35 ± 7.7 and 53.02 ± 8.01) than among other nurses (36.03 ± 5.81 and 49.76 ± 6.30). There was a direct and moderate relationship between a sense of coherence and self-compassion (*P*-value <0.005). The higher the score of compassion for oneself, the higher was the score of sense of coherence. Furthermore, the sense of coherence had a direct and weak relationship with all dimensions of self-compassion, except for the extreme imitation dimension, which showed a direct and moderate relationship to other dimensions (*P*-value <0.001).

Conclusions: Self-compassion and a sense of coherence, as a form of self-communication, increase nurses' satisfaction and reduce nurses' job stress and, as a result, job performance is improved.

Keywords: *nurses • psychiatric hospital • self-compassion • sense of coherence • compassion • coherence*

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1. Introduction

Nursing is the nation's largest health-care profession, with >3.8 million registered nurses (RNs) nationwide.[1] Nurses are in the front line in the psychologically demanding everyday care of patients, which can often undermine their emotional balance, influencing both their physical and mental well-being.[2] Moreover, formal

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caregivers are frequently burdened with an excessive workload, high working pressure and demands, spending more time at work than on other dimensions of their lives.[3]

In other words, challenges in the work environment can have several negative effects, including stress and depression, job dissatisfaction, and job insecurity.[4] Caring is a compassionate act, and in the meantime, compassion for others, in whatever form it takes, requires compassion for oneself.[5] Self-compassion is a powerful resource and a foundation for compassionate care and has helped nurses cope with their workplace and life experiences and events.[6] In turn, it increases the nurses' recovery and adjustment and makes them feel safe, connected, and emotionally calm; these factors altogether increase their well-being and help them to see the patient apart from stress and burnout in the workplace. It also increases the quality of care provided. Another variable that plays an important role on the performance and makes the caregiver adaptable to the situation and environment and ultimately show compassion for patients is a sense of coherence. In other words, one of the most critical determinants of the capacity to cope successfully with distress is the sense of coherence, which shapes the individual experience of a stressful event and allows it to be perceived as meaningful, manageable, and comprehensible. It is a key psychological factor that boosts resilience and is good for one's health.[7] Although a sense of coherence has been regarded as a general viewpoint to life, there are some elements of the sense of coherence that may be very much associated with personality traits rather than viewpoints. The sense of coherence includes comprehensibility, manageability, and meaningfulness. A sense of coherence serves as a buffering factor for stress and mental illness.[8] It has been linked to positive outcomes, such as psychological well-being, health, health-related behaviors, adaptive coping, academic achievement, and lower levels of depression and anxiety.[9,10]

Considering the above-mentioned matters, the health of any society depends on the motivation and morale of the nurses, and this is of particular importance in dealing with both physically and mentally ill patients. The components self-compassion and sense of coherence are very effective in maintaining the mental health, self-confidence, and self-esteem of nurses and ultimately determine nurses' performance in dealing with patients. Because the psychiatric ward is one of the most stressful wards and nurses in this ward are constantly faced with a stream of stressful and frustrating stimuli, they suffer from excessive stress and emotional exhaustion; thus, it is both physically and mentally important for them to have a sense of coherence and compassion to enable patient care. Despite the special role of psychiatric nurses, they have received less attention in research; therefore, this study aimed to compare the level of self-compassion and sense of coherence in nurses of psychiatric hospitals and other hospitals of the Kerman University of Medical Sciences with the hope of taking a small step to promote the physical and mental health of nurses.

2. Methods

2.1. Design

The present study is a descriptive-comparative study of applied type.

2.2. Participants

The statistical population of this comparative study included nurses from psychiatric hospitals and other nurses who met the inclusion criteria.

In the psychiatric hospitals, all nurses (100 people) were enrolled by the census method, and 100 nurses from other hospitals of the Kerman University of Medical Sciences (Afzalipour, Shafa, and Bahonar) were enrolled by stratified random sampling. In this study, the hospitals in question were considered as classes and, using the proportional allocation method, the sample size was determined for each hospital. According to the number of nurses in each hospital, random sampling was performed for each hospital. After preparing the list of nurses in each hospital and numbering them, the researchers selected the samples from each hospital based on a table of random numbers.

2.3. Inclusion criteria

Our inclusion criteria were as follows: those having a bachelor's degree or higher; formal, contract and design nurses; and those who were working at the time of data collection.

2.4. Exclusion criteria

Incomplete completion of the questionnaire (at least 10% of the questions were not answered or the answers were distorted) led to exclusion of the participant from the study.

2.5. Instruments

A registration form containing demographic and background information, self-compassion questionnaire, and sense of coherence questionnaire were used to collect the data.

2.5.1. Demographic questionnaire

It contained questions related to the individual characteristics of the research sample, which included 8 items: age, gender, work experience, marital status, number of children, number of siblings, type of employment, and type of shift work.

2.5.2. Self-compassion questionnaire

A 12-item self-compassion questionnaire developed by Raes et al.,[11] which examines and measures 6 components, was used. The questionnaire is scored on a 5-point Likert scale (never = 1, almost never = 2, no comment = 3, almost always = 4, and always = 5). The minimum and maximum scores of this tool were 12 and 60, respectively. Questions 1, 4, 8, 9, 11, and 12 were also scored in reverse. Higher scores in this tool indicate high self-compassion, and low scores indicate low self-compassion. One of the important features of this tool is that it has good psychometrics, and most of its components (6 components) can cover the results of this research well and show the changes (even minor changes) well. Neff[12] indicated the Cronbach's alpha coefficient of this scale as 0.92, and Odou and Brinker[13] reported this coefficient as 0.86.

Shahbazi et al.[14] reported the Cronbach's alpha coefficients for the whole scale as 0.91 and for the 6 subordinate factors as follows: overidentification – 0.77, self-kindness – 0.83, mindfulness – 0.92, isolation – 0.88, common humanity – 0.91, and self-judgment – 0.87. Furthermore, Khosravi et al.[15] reported the alpha coefficient for the overall score of the scale as 0.76, and the Cronbach's alpha coefficients for the subscales of self-kindness, self-judgment, common humanity, isolation, mindfulness, and overidentification were 0.81, 0.79, 0.84, 0.85, 0.80, and 0.83, respectively. The validity of the questionnaire has also been reported as favorable.

2.5.3. Sense of coherence questionnaire

The short form of the sense of coherence questionnaire was developed by Antonovsky in 1987.

The sense of coherence questionnaire examines three dimensions (meaningfulness, manageability, and comprehensibility). Each item is scored on a 7-point Likert scale, in the range of 29–203 and 13–91, respectively, with higher scores corresponding to a more-developed sense of coherence. In this instrument, a score of 13–63 indicates a low sense of coherence, a score of 64–79 indicates a moderate sense of coherence, and a score of 80–91 indicates a high sense of coherence. The internal validity of this questionnaire has been expressed in several studies as ranging from 0.82 to 0.86.[16,17] Vifladt et al.[18] reported the validity of subscales using Cronbach's alpha coefficient for perceptibility of 0.79, controllability of 0.89, and significance of 0.82.

2.6. Procedure

To conduct the study, the researchers referred to the research environment, i.e., psychiatric hospital or other hospitals of the Kerman University of Medical Sciences, and obtained the necessary permission from the hospital management to conduct the study. After selecting the qualified nurses, the researchers declared the objectives of the study, provided a simple description of the study, and assured the confidentiality of the information. In addition, the nurses were free to participate or leave the study at any stage. In order to resolve possible ambiguities, an interval of time was given to answer the questions. After taking informed consent, the subjects were given the self-compassion and sense of coherence questionnaires. Then, the completed questionnaires were collected by the researchers.

2.7. Data analysis

The Statistical Package for Social Sciences (SPSS), version 25, was used to analyze the data. Descriptive statistics (frequency, percentage, mean, and standard deviation) were used to describe the demographic and contextual characteristics of the research units and other study variables. Furthermore, inferential statistical tests, including independent *t*-test, one-way analysis of variance (ANOVA), and Pearson correlation coefficient, were applied for analyzing the results of the study.

2.8. Ethical considerations

Ethical approval was obtained from the Kerman University of Medical Sciences (approval number: IR.KMU.REC.13933.048). Written informed consent was obtained from the research participants. Explanations were given about the presence and absence of samples in the study. Explanations were given about the objectives of the study and the application of its possible results to the subjects. The results of the study were also given to the authorities, if necessary. This research was conducted considering the religious, legal, and professional principles of the participants.

3. Results

Table 1 presents the individual and contextual characteristics of the subjects in in both groups. The mean

age of subjects in the group of nurses of other hospitals was 31.67 ± 9.17 years and in the group of nurses of psychiatric hospitals was 33.32 ± 10.02 years. Also, the mean work experience of nurses of other hospitals was 6.38± years and in nurses of the psychiatric hospitals was 5.89 ± 3.87 years.

The mean score of self-compassion in the groups of nurses of other hospitals was 36.03 ± 5.81 and in the group of those in psychiatric hospitals was 39.35 ± 7.7. Given the normal distribution of data, the results of the independent *t*-test showed a significant difference between the two groups in terms of mean self-compassion score and its dimensions (except self-judgment and isolation) (*P*-value <0.005). Therefore, subjects of psychiatric hospitals had higher levels of self-compassion than subjects of other hospitals (Table 2).

Variables	Nurses of other hospitals		Nurses of psychiatric hospital		Mean	SD
	Frequency	Percentage	Frequency	Percentage		
Sex						
Male	31	31	20	20		
Female	69	69	80	80		
Education						
Bachelor's degree	85	85	90	90		
Master's degree	15	15	10	10		
Marital status						
Single	64	64	74	74		
Married	36	36	26	26		
Employment type						
Contractual	40	40	53	53		
Temporary-to-permanent	31	31	28	28		
Conscription law's conscripts	29	29	19	19		
Quantitative specifications						
Age (others), years					31.67	9.17
Age (psychiatric), years					33.32	10.02

Note: SD, standard deviation.

Table 1. Individual and contextual characteristics of subjects in two groups.

Group / Variable	Nurses of psychiatric hospitals		Nurses of other hospitals			
	Mean	SD	Mean	SD	Test	*P*-value
Self-kindness	6.24	1.4	6.72	1.74	2.14	0.002
Self-judgment	5.86	1.75	6.65	1.99	2.96	0.11
Common humanity	5.88	1.48	6.55	1.74	2.92	0.01
Isolation	5.78	1.61	6.43	1.64	2.82	0.60
Mindfulness	6.27	1.53	6.54	1.83	1.12	0.006
Over identification	6.06	1.73	6.46	2.08	1.14	0.01
Total	36.03	5.81	39.35	7.7	3.37	0.004

Note: SD, standard deviation.

Table 2. Determination and comparison of the mean score of self-compassion and its dimensions in subjects of both groups.

Group / Variable	Nurses of other hospitals		Nurses of other hospitals			
	Mean	SD	Mean	SD	Test	*P*-value
Perceptibility	18.28	3.34	20.13	3.86	3.54	0.001
Controllability	16.93	2.96	17.01	3.36	0.17	0.8
Significance	14.55	3.77	15.88	3.74	2.63	0.009
Total	49.76	6.30	53.02	8.01	3.19	0.002

Note: SD, standard deviation.

Table 3. Comparison of the mean score of sense of coherence and its dimensions in nurses working in the two groups of hospitals.

Variable	Self-compassion	Self-kindness	Self-judgment	Common humanity	Isolation	Mindfulness	Overidentification
Sense of coherence	$r = 0.385$ <0.001	$r = 0.252$ <0.001	$r = 0.270$ <0.001	$r = 0.206$ <0.001	$r = 0.229$ <0.001	$r = 0.211$ <0.001	$r = 0.306$ <0.001

Table 4. The relationship between the score of sense of coherence and the dimensions of self-compassion in both groups.

The mean score of sense of coherence in the groups of nurses of other hospitals was 49.76 ± 6.30 and in the group of nurses in psychiatric hospitals was 53.02 ± 8.01. Given the normal distribution of data, the results of the independent *t*-test showed a significant difference between the two groups in terms of mean sense of coherence score and its dimensions (controllability) (*P*-value <0.005). Therefore, subjects of psychiatric hospitals had higher levels of sense of coherence (except controllability) than subjects of other hospitals (Table 3).

According to the independent *t*-test and ANOVA, the self-compassion score was higher in men than in women, as well as in those having a master's degree than in those with a bachelor's degree. Furthermore, the self-compassion score was higher in married nurses than in single ones, as well as in conscription law's conscript nurses than among contractual and temporary-to-permanent nurses. However, these differences were not statistically significant (*P*-value <0.005).

The results of the Pearson correlation test showed a significant and moderate relationship between sense of coherence and self-compassion. A higher score of compassion is associated with a higher score of the sense of coherence. Moreover, the sense of coherence had a direct and weak relationship with all dimensions of self-compassion, except for extreme replication, which showed a direct and moderate relationship with other dimensions (*P*-value <0.001) (Table 4).

4. Discussion

Nurses are the backbone of the health-care system. The health of any society is directly associated with the motivation and spirit of the nurses of that society, and this is especially important when encountering physical and mental patients. Self-compassion and sense of coherence are very effective in mental health, self-confidence, and self-esteem of nurses and ultimately determine their performance in dealing with mental patients. The present study investigated the variables self-compassion and sense of coherence as factors influencing the performance of nurses. The results revealed that the mean score of self-compassion in nurses of other hospitals was lower than among nurses of psychiatric hospitals. Therefore, nurses of the psychiatric hospital had higher levels of self-compassion compared to nurses of the other hospitals. Consistent with this finding, Wiklund Gustin and Wagner[19] found that nurses have a high rate of self-compassion and the conditions in the workplace are effective in creating it. They also stated that high levels of self-compassion in nurses play an important role in their mental health and should not be taken to mean suffering for themselves. In another study, Kret[20] stated that self-compassion enables caregivers to be compassionate with their patients, which in turn raises the quality of care provided.

Furthermore, Breines and Chen[21] also recognized in their study that people who have higher self-compassion have more power to improve their weaknesses and to correct their moral problems and challenges; they further stated that self-compassion creates in nurses the ability to love and be kind to others.

Based on the theory of Raes et al.,[11] it can be said that self-compassion as a form of self-communication increases the level of satisfaction in psychiatric nurses and that people with high compassion act efficiently

in different and challenging situations and identify their competencies and overcome problems through kindness to themselves. Furthermore, these people also have a positive focus, regular planning, and self-acceptance, which consequently increases their mental well-being through increased health and mental coherence. Compassionate care is the process in which the nurse communicates with the patient in a constructive interaction and, by putting herself/himself in the patient's condition and understanding the condition, discovers the patient's concerns and tries her/his best to resolve those concerns. According to the concept analysis, constructive interaction between the nurse and the patient is one of the most important features of compassionate care, which is not mentioned in previous definitions. In this study, nurses also emphasized that they tried their best to address patients' concerns. Therefore, the present study can be a basis for further studies in the field of compassionate care.[22]

Our results demonstrated that the mean score of sense of coherence was higher in nurses of psychiatric hospitals than in nurses of other hospitals. In line with this finding, Takeuchi and Yamazaki[23] found that nurses with high sense of coherence – due to lack of stress and job conflict – were more inclined to educate patients. Work-–family conflict was significantly associated with a sense of coherence, and this effect had a greater impact on nurses' mental health than their occupational and family characteristics. Furthermore, sense of coherence had a major impact on nurses' physical and mental health, as well as having a significant impact on work-–family conflict in relation to depression. Masanotti et al.[24] found that sense of coherence was a predictor of a depressive state, burnout, and job dissatisfaction among female nurses; therefore, sense of coherence could be a health-promoting resource.

Sense of coherence – as a concept – is within the human information processing system to resolve conflicts and withstand the obvious and inevitable pressures of life; it also emphasizes the process of staying healthy despite the overburden pressure. Furthermore, this sense can moderate physical and psychological disturbances, as well as strengthen a sense of staying healthy despite stress. The study of Betke et al.[25] showed that the sense of coherence has a health potential in a stressful working environment – a high sense of coherence translates into better mental health, correct functioning in the working environment, and using adaptive strategies of coping with stress. Nurses with a stronger sense of coherence used more adaptive strategies to deal with stress than those with average or low levels of stress. Therefore, in can be said that people with high sense of coherence are generally more likely to release the stress and end the related tensions. During critical times, people with high sense of coherence will experience shorter periods of harmful stress than people with weak sense, which shows the major relation between the level of coherence and health.[24,25] Furthermore, our results revealed a direct relationship between a sense of coherence and self-compassion, meaning that as the score of compassion for oneself increases, the sense of coherence increases. In this regard, Yarnell and Neff[5] showed that people with higher self-compassion show a greater tendency to compromise for resolving interpersonal conflicts and have less emotional turmoil. Koushede and Holstein[26] noted that people with a high sense of coherence are much resistant to stress and also are hardworking. Sense of coherence reduces nurses' job stress, which in turn makes nurses to respect patients' rights. Furthermore, job performance is improved.

Saeeidi et al.[27] found in their research that sense of coherence and self-kindness are significant predictors of psychological well-being, while emotional malaise did not predict the psychological well-being of girls". As a result, these findings indicate the role of sense of coherence and self-kindness in preventing the psychological consequences of this syndrome in order to promote psychological well-being. Ghaffari et al.[28] also found that due to the direct and indirect effects of exogenous and mediating variables on nurses' attitudes toward patient education, nurses' tendency to educate patients can be increased through the strengthening of personal intelligence, sense of coherence, and compassion for the lives of others. Findings obtained from the research of Hosseinpour et al.[29] demonstrated a significant and negative relationship between sense of coherence and anxiety in patients with coronary heart disease, meaning that the higher the level of coherence in patients, the lower the level of anxiety will be. Anxiety is an important risk factor for heart disease, and sense of coherence can help patients to cope with high levels of stress and anxiety and stay healthy. Therefore, necessary training about sense of coherence can help patients to cope with anxiety and stress.

Ajam et al.[30] also showed a significant positive relationship between the components of self-kindness and intelligence on the one hand and the general health of nursing students on the other and also showed a significant negative relationship between the 3 components of self-judgment, isolation, and overidentification and students' general health. The current study showed that there is a relationship among self-compassion, general health, and students' academic achievement. Therefore, holding self-compassion training courses for students is recommended to enhance

the self-compassion status and academic achievement of students. The present study also had some limitations. Initially, nurses' cooperation in filling out the questionnaires was limited, and the problem was met by measures such as proper explanation of research objectives and the use of trained and trusted staff as questioners. Fatigue and workload were other limitations of the study, which affected the response rate; to overcome these limitations, the researchers tried to deliver the questionnaire to the participants when they had spare time or less workload, as well as had good mental and emotional preparation.

5. Conclusions

The results of the present study showed that self-compassion and sense of coherence were high among nurses working in psychiatric departments. Moreover, self-compassion was directly associated with sense of coherence. In addition, it was concluded that compassion itself is an effective and predictive factor for nurses' sense of coherence, and in order to increase the sense of coherence in nurses, it seems necessary to take some measures to increase their self-compassion in the areas of moral knowledge and enthusiasm for service delivering. Development of self-compassion in challenging environments, including hospitals, provides the emotional resources needed to care for others. Nurses with high self-compassion are more confident, as well as being less emotionally disturbed. Self-compassion is not a predetermined trait but can be promoted through education. More importantly, compassionate people can encounter the suffering of others without themselves undergoing suffering. In nurses, self-compassion allows them to better understand patients' pain without being immersed in it. In other words, when faced with difficult situations, they offer compassionate comfort and can provide stronger, more stable, and more resilient care for patients. Sense of coherence reduces nurses' job stress and, as a result, they respect patients' rights. Furthermore, job performance will be improved. Based on what has been mentioned, it can be inferred that health-care personnel, including nurses, must strive to fulfill such a responsibility. Therefore, this study shows the importance of self-compassion and the sense of coherence, as well as the relationship between these two categories, and doubles the responsibility of professors in providing training on more ethical and professional issues to students and nurture people with more competence and mercy in dealing with patients. Nursing policymakers and clinical nurses can benefit from the results of this study in the clinic because their compassion and sense of coherence are two important tools for the nursing profession, as well as being necessary for proper care. Nurses with a sense of coherence and self-compassion will help to promote the health of the community. Nurses and medical staff are the most important pillars in promoting the community health due to their effective role on community members. As a result, it seems necessary to train nurses with sense of coherence and self-compassion, so that they consider themselves obliged to communicate effectively and efficiently and have high moral and cultural standards such that health-care members and the community can benefit from them. Dealing with self-compassion and sense of coherence should form the basis for planning and organizing training courses by officials in this field. Education in this case should start from the beginning of university studies and continue unceasingly during professional activities.

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Author contributions

GFA analyzed and interpreted the data. IM was a major contributor in writing the manuscript. All authors read and approved the final manuscript. SI is the first supervisor of the thesis and suggested the idea. NA is the second supervisor of the thesis, who collaborated in writing the proposal and analyzing the results.

Ethical approval

The study was approved by the Ethics Committee of Kerman University of Medical Sciences (Ethical code No. IR.KMU.REC.1399.048). At the beginning of the administration of the online questionnaire, the necessary details of the research and its objectives were presented, and all participants filled out the online questionnaires anonymously.

Conflicts of interest

All contributing authors declare no conflicts of interest.

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