

Effects of a Narrative Nursing-Based Humanistic Care Program on Psychological Well-Being in Conscious Patients in the ICU

Hong-Mei Liu^{1,2,*}, Jing-Yi Jin^{2,*}, Yun Zhang², Jing-Yi Gao², Jian-Hong Ji¹

¹Department of Critical Care Medicine, Nantong First People's Hospital, Nantong, Jiangsu Province, 226006, People's Republic of China; ²School of Nursing and Rehabilitation, Nantong University, Nantong, Jiangsu Province, 226001, People's Republic of China

*These authors contributed equally to this work

Correspondence: Jian-Hong Ji, Department of Critical Care Medicine, Nantong First People's Hospital, No. 666 of ShengLi Road, Chongchuan District, NanTong, Jiangsu Province, 226006, People's Republic of China, Tel +86 1381526783, Email jijianhong_jjh@126.com

Objective: The aim of this study is to examine the effects of a humanistic care program based on narrative nursing theory on psychological well-being in conscious patients in the intensive care unit (ICU).

Methods: A convenience sampling method was used to recruit patients in the ICU from a tertiary grade A general hospital. The control group received standard humanistic care measures, whereas the experimental group participated in a narrative-based humanistic care program. The intervention was administered from the point of regained consciousness until hospital discharge. Outcome measures included the sense of being cared for, anxiety, psychological distress, and sleep quality, which were assessed and compared between the two groups.

Results: A total of 86 patients completed the study, with 42 in the experimental group and 44 in the control group. Following the intervention, the sense of being cared for was significantly higher in the experimental group compared to the control group. Anxiety scores were significantly lower in the experimental group than in the control group. Depression scores were also lower in the experimental group compared to the control group. Additionally, psychological distress scores were reduced in the experimental group when compared to the control group.

Conclusion: The implementation of a narrative nursing-based humanistic care program did not yield significant improvements in sleep quality among conscious patients in the ICU. However, the program can enhance the patients' sense of being cared for, improve their anxiety and depression, and reduce the level of psychological pain.

Keywords: humanistic care, ICU, narrative nursing, nursing psychological distress, sleep quality

Background

The intensive care unit (ICU) is a specialized setting designed to provide advanced life support and continuous monitoring for patients with critical diseases. Advances in medical technology have contributed to improved survival rates among patients in the ICU, and with the refinement of sedation protocols, an increasing number of patients remain conscious during their hospitalization.¹⁻³ Beyond physiological needs, conscious patients in the ICU often require greater psychological and social support. Failure to address humanistic aspects of care may lead to complex physical and psychological responses, including anxiety, depression, distress, feelings of inferiority, guilt, restlessness, and avoidance, which can significantly impact overall quality of life.

Humanistic care is a fundamental component of nursing practice. It involves collaboration among healthcare professionals, hospital administrators, patients, and family members, playing a key role in facilitating recovery, enhancing the patient experience, and fostering positive relationships among healthcare providers.⁴ Strengthening humanistic nursing care, optimizing care processes, and improving service quality are key directions for the advancement of nursing. Expert consensus on humanistic care for patients in the ICU emphasizes the importance of maximizing patient-centered humanistic care to improve the hospitalization experience of patients who are critically ill.⁵



Narrative nursing, which incorporates narrative competence into clinical practice, enables nurses to gain a comprehensive understanding of the experiences of patients, respond to their challenges, and provide respectful, empathetic care. This approach enhances the depth of nurse-patient communication, integrates nursing with the humanities, and serves as an effective strategy to encourage health-promoting behaviors.^{6,7} However, current research has paid little attention to the special and care-requiring population of ICU awakesness. Based on this, This study aims to evaluate the effects of the structured humanistic care program on outcomes such as anxiety, depression, psychological distress, and perceived quality of care among conscious ICU patients.

Participants and Methods

Research Participants

Patients who met the inclusion and exclusion criteria and were hospitalized in the ICU of a tertiary grade A general hospital in Nantong City between March and September 2024 were selected as research participants. The inclusion criteria were as follows: (1) age between 18 and 65 years, (2) an expected ICU stay of at least seven days, (3) a conscious state in the ICU (Richmond Agitation-Sedation Scale score of -1 to $+1$, with a negative assessment for delirium using the Confusion Assessment Method for the ICU), and (4) voluntary participation of both patients and their family members. Exclusion criteria included (1) hemodynamic instability, (2) a diagnosis of a mental disorder or neurodevelopmental delay, and (3) a history of major stressful events within the past two months.

Withdrawal criteria were established as follows: (1) voluntary withdrawal from the study, (2) discharge against medical advice or death during the study period, and (3) clinical deterioration which prevented continued participation in the intervention.

The required sample size was determined using the formula for two-sample mean comparison:

$$n_1 = n_2 = 2[(\mu\alpha + \mu\beta)s/\delta]^2, \text{ with } \alpha = 0.05, \text{ two-sided test } \beta = 0.20.$$

In this study, the allowed error/overall error effect value (δ/σ) was 0.80. Based on these parameters, reference values from statistical tables ($\mu\alpha = 1.96$, $\mu\beta = 1.282$) indicated that at least 33 participants were required in each group. Accounting for a 20% anticipated loss to follow-up, a final minimum sample size of 80 patients was determined, with at least 40 patients allocated to each of the observation and control groups.

A non-concurrent controlled quasi-experimental study design was implemented. Participants enrolled between March and May 2024 were assigned to the control group and received standard psychological and humanistic nursing care, while those enrolled between July and September 2024 received an intervention incorporating a humanistic care program based on narrative nursing theory. Informed consent was obtained from all participants prior to study enrollment. Ethical approval for this study was granted by the hospital's ethics committee (Approval No. 2022KT132).

Research Methods

Intervention Protocol for the Experimental Group

Establishing the Research Team

The research team comprised of ten core members, including one associate chief physician from the Department of Critical Care Medicine (PhD), one head nurse from the Department of Critical Care Medicine (master's degree, master's supervisor), six critical care specialist nurses (one with a master's degree and five with bachelor's degrees), and two master's students. The associate chief physician provided expertise in addressing professional inquiries, while the head nurse oversaw the overall design of the research protocol, ensured quality control, and managed the formulation and revision of the protocol. Specialist nurses were responsible for implementing the protocol, whereas master's students assisted the head nurse in developing the intervention protocol, organizing and compiling study materials, and performing data analysis.

Implementation of the Intervention Protocol

Intervention Protocol for the Control Group. Routine psychological and humanistic care measures commonly implemented in the ICU were provided. These measures included:

- Introducing the intensive care environment to familiarize patients with their surroundings during the early stages of treatment, along with providing comprehensive information regarding disease etiology and relevant nursing precautions.
- Informing family members about necessary items for hospitalization, such as razors, toiletries, eye masks, and earplugs.
- Obtaining informed consent from family members before implementing physical restraints, with detailed explanations provided to patients regarding the necessity, purpose, and function of the restraints to facilitate understanding and cooperation.
- Notifying family members in advance when patients were required to leave the ICU for medical examinations.
- Arranging for one designated visitor to have a 30-minute bedside visit at a specified time each day.
- Providing explanations before conducting nursing procedures, including medication administration, dressing changes, enteral nutrition, and various intubations and extubations.
- Providing timely reassurance and emotional support when patients expressed concerns regarding the ICU environment, treatment, medications, or when they exhibited restlessness, anxiety, or fear.
- Informing patients about the names, functions, and necessary protective measures related to tubes inserted into their bodies, as well as providing safety education.
- Communicating with patients during shift handovers to encourage cooperation.

The intervention period began once patients regained consciousness and continued until hospital discharge, with no restrictions on the duration or frequency of interventions. Scale assessments were conducted at the time of enrollment and on the day of discharge.

Intervention Protocol for the Experimental Group. Along with the measures provided to the control group, the experimental group received a humanistic care program based on narrative nursing theory. This protocol was developed using findings from prior research on constructing a humanistic care nursing protocol for conscious ICU patients and had undergone expert consultation. The intervention was delivered in diverse formats with comprehensive content.

The frequency of the intervention was set at twice daily—once during the day shift and once during the evening shift—with each session lasting approximately 15 minutes. The specific timing of the intervention was primarily determined based on patient preference. Further details are provided in [Supplementary Table 1](#).

Quality Control of the Research Process

Following the recovery of consciousness, a comprehensive clinical assessment and risk screening were conducted by physicians to ensure patient safety. Based on these evaluations, specialist nurses performed nursing assessments and diagnoses and subsequently invited eligible patients and their family members to participate in the study in accordance with the inclusion and exclusion criteria. Prior to enrollment, detailed information regarding the purpose and significance of the study was provided to patients and their family members, and privacy protection measures were implemented.

One month before initiating the intervention for the experimental group (June 2024), standardized training was conducted by physicians and the head nurse. Specialist nurses and master's students participated in structured learning sessions, which covered theoretical knowledge and practical applications related to narrative-based care, as well as essential aspects of humanistic nursing. The training ensured that all participants acquired a thorough understanding of the specific components of the intervention protocol. Specialist nurses were required to pass an assessment before being authorized to implement the intervention.

Throughout the implementation of the protocol, the head nurse monitored adherence to the intervention and systematically reviewed any challenges encountered. Identified issues were discussed among team members, and necessary modifications were made to optimize the protocol. During data collection and analysis, two graduate students performed cross-checking and data entry. Any discrepancies in the data were promptly identified and returned for verification to ensure accuracy.

Survey Tools

General Information Questionnaire

The general information questionnaire was designed based on a review of relevant literature and was developed by two graduate students. The questionnaire comprised of two sections:

General demographic data: This section collected information on sex, age, educational level, monthly per capita household income, primary caregiver, and payment method for medical expenses.

Disease-related information: This section included details on artificial airway status, the presence of underlying medical conditions, length of stay in the ICU, and the duration of the intervention.

Caring Behavior Scale

This scale was originally developed by Wolf and was later translated into Chinese and validated by researchers.⁸ It comprises of three dimensions: respect and connection, knowledge and skills, and support and assurance, each containing multiple items. A six-level scoring system is used, with all items positively scored, where 1 = never and 6 = frequently. The total score ranges from 24 to 144. The Cronbach's alpha coefficient for the overall scale is 0.959, while the coefficients for the three dimensions are 0.897, 0.906, and 0.928, respectively, indicating high reliability and validity.

Self-Rating Anxiety Scale

The Generalized Anxiety Disorder 7-item Scale (GAD-7) was originally developed by Spitzer et al based on the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition diagnostic criteria.⁹ It is a brief self-report instrument designed for screening generalized anxiety and assessing the severity of anxiety symptoms.

Following its adaptation into Chinese, the scale comprises of seven items rated using a four-level scoring system:

Not at all = 0 points

Several days = 1 point

More than half the days = 2 points

Nearly every day = 3 points

The validity of the Chinese version was evaluated by Wang et al in hospitalized patients in general hospitals.¹⁰ The correlation coefficients between individual items and the total score ranged from 0.734 to 0.820, and the Cronbach's alpha coefficient was 0.90, indicating high reliability and validity.

Self-Rating Depression Scale

The Patient Health Questionnaire-9 (PHQ-9) was used in this study to assess depression levels among patients. Developed by Spitzer et al, the PHQ-9 is a self-report questionnaire designed for use in primary care settings to screen for and evaluate the severity of depressive symptoms.¹¹ The scale consists of nine items, each rated on a four-point scale:

0 = Not at all

1 = Several days

2 = More than half the days

3 = Nearly every day

Total scores range from 0 to 27. The Cronbach's alpha coefficient for the PHQ-9 has been reported as 0.857, indicating good internal consistency and reliability.

Distress Thermometer

The Distress Thermometer, translated into Chinese by Tang et al, is a rapid screening tool designed to assess the severity of psychological distress.¹² It is a visual analog scale ranging from 0–10, where 0 represents no distress and 10 indicates extreme distress. Psychological distress is categorized as follows:

Severe distress: > 7 to < 10 points

Moderate distress: > 4 to < 7 points

Normal psychological fluctuation: ≥ 0 to < 4 points

Higher scores correspond to greater levels of psychological distress. The Cronbach's alpha coefficient for the DT has been reported as 0.890, demonstrating high reliability and validity.

Richards-Campbell Sleep Questionnaire

The Richards-Campbell Sleep Questionnaire (RCSQ) was developed by Professor Richards in 2000 and is widely used for assessing sleep quality in patients who are critically ill.¹³ The scale comprises of six items, with the first five evaluating sleep depth, sleep latency, frequency of nighttime awakenings, ability to return to sleep after awakening, and overall sleep quality. The sixth item assesses the subjective perception of noise in the environment.

Each item is rated using a 0–100 mm visual analog scale (1 mm = 1 point), where 0 represents the poorest sleep quality and 100 indicates the best sleep quality. The total scale score is calculated as the average of the first five items. Sleep quality is classified as follows:

0–25 points: Poor sleep quality

76–100 points: Good sleep quality

Higher scores indicate better sleep quality. The Cronbach's alpha coefficient for the Chinese version of the RCSQ has been reported as 0.895, demonstrating high reliability.

Data Collection Method

Prior to the initiation of the intervention, master's students in nursing provided patients and their families with a detailed explanation of the study's purpose and significance, obtained their cooperation, and secured signed informed consent forms. Once patient enrollment was confirmed, general information was collected by graduate students in nursing, through face-to-face interviews and medical system queries to establish basic patient information files.

Assessments were conducted before the intervention and on the day of discharge by critical care specialist nurses responsible for patient care. The evaluation included the Caring Behavior Scale, Anxiety Self-Rating Scale, DT, and Sleep Quality Scale. For patients unable to complete the forms independently, primary nurses assisted by clarifying questions to ensure comprehension and helped document responses without altering the patients' intended answers.

Statistical Methods

Excel and SPSS 26.0 software were used for data collection and analysis. Measurement data following a normal distribution were expressed as mean \pm standard deviation ($\bar{x} \pm s$). Independent samples t-tests were used for between-group comparisons, while paired samples t-tests were applied for within-group comparisons.

Categorical data were presented as frequency and percentage (%), with between-group comparisons conducted using the chi-squared (χ^2) test and the Wilcoxon rank sum test. A value of $p < 0.05$ was considered statistically significant.

Results

Comparison of General Information Between the Two Groups

A total of 98 patients were recruited for the study, with 51 assigned to the control group and 47 to the experimental group. Due to changes in patient conditions, voluntary withdrawals, and other factors contributing to sample attrition, the final analysis included 44 patients in the control group and 42 in the experimental group.

A comparison of general demographic and clinical characteristics between the two groups revealed no statistically significant differences ($p > 0.05$), indicating baseline comparability. For further details, refer to [Table 1](#).

Comparison of Pre- and Post-Intervention Scores on Various Levels

Following the intervention, an increase was observed in the sense of being cared for score in the experimental group, while scores on the GAD-7, PHQ-9, and DT revealed a decrease. These changes were statistically significant ($p < 0.05$).

Comparisons between the two groups after the intervention revealed statistically significant differences in sense of being cared for, GAD-7, PHQ-9, and DT scores ($p < 0.05$ for all). Although the mean sleep quality score in the experimental group revealed improvement, the difference between the two groups was not statistically significant ($p > 0.05$). For further details, refer to [Table 2](#).

Table 1 Comparison of General Data (n = 86)

Item	Control Group (n = 44)(%)	Intervention Group (n = 42)(%)	Statistical Value (χ^2/Z)	p-value
Sex			0.501 ¹⁾	0.479
Male	25 (56.8)	27 (64.3)		
Female	19 (43.2)	15 (35.7)		
Educational level			-0.278 ²⁾	0.781
Primary school and below	11 (25.0)	6 (14.3)		
Junior high school	10 (22.7)	17 (40.5)		
High school and technical secondary school	14 (31.8)	11 (26.2)		
College and above	9 (20.5)	8 (19.0)		
Artificial airway status			-0.450 ²⁾	0.653
None	16 (36.4)	13 (30.9)		
Endotracheal intubation	22 (50.0)	23 (54.8)		
Tracheotomy	6 (13.6)	6 (14.3)		
Presence of underlying disease			1.102 ¹⁾	0.294
Yes	29 (65.9)	32 (76.2)		
No	15 (34.1)	10 (23.8)		
Primary caregiver			-0.914 ²⁾	0.361
Spouse	25 (56.8)	23 (54.7)		
Parents	5 (11.4)	7 (16.7)		
Children	14 (31.8)	12 (28.6)		
Monthly per capita household income			-1.262 ²⁾	0.207
≤5000	12 (27.3)	5 (11.9)		
5001-10,000	25 (56.8)	30 (71.4)		
≥10,000	7 (15.9)	7 (0.17)		
Payment method for medical expenses			-1.836 ²⁾	0.066
New rural cooperative medical scheme	5 (11.4)	9 (21.4)		
Municipal or provincial medical insurance	30 (68.2)	25 (59.5)		
Retirement or civil servant medical insurance	5 (11.4)	5 (11.9)		
Self-pay	4 (9.0)	3 (7.2)		
Age (years)	43.18±11.51	42.02±14.14	-0.417 ³⁾	0.678
ICU length of hospital stay (d)	14.73±4.12	15.19±4.86	-0.478 ³⁾	0.634
Intervention days (d)	10.16±3.09	9.43±2.59	1.187 ³⁾	0.239

Notes: ¹⁾ χ^2 -test; ²⁾Rank sum test; ³⁾Independent samples t-test (normal distribution, homogeneity of variance).

Table 2 Comparison of Related Indicators Before and After Intervention (Points, $\bar{x} \pm s$)

Group	N	Caring Behavior Scale Score		t-value	p-value
		Before Intervention	After Intervention		
Experimental group	42	91.45±3.44	100.60±2.76	-16.431	<0.001
Control group	44	91.18±4.21	92.23±4.24	-1.596	0.118
t-value		-0.326	-10.799		
p-value		0.746	<0.001		
Group	N	Generalized Anxiety Disorder Scale Score		t-value	p-value
		Before Intervention	After Intervention		
Experimental group	42	15.29±1.44	9.31±1.75	23.13	<0.001
Control group	44	15.39±1.38	14.77±0.80	3.33	0.002
t-value		0.331	18.78		
p-value		0.742	<0.001		

(Continued)

Table 2 (Continued).

Group	N	Patient Health Questionnaire Score		t-value	p-value
		Before Intervention	After Intervention		
Experimental group	42	12.21±1.07	11.33±1.24	4.628	<0.001
Control group	44	12.32±1.16	11.98±1.17	1.774	0.083
t-value		0.432	2.474		
p-value		0.667	0.015		
Group	N	Psychological Distress Scale Score		t-value	p-value
		Before Intervention	After Intervention		
Experimental group	42	6.60±0.91	4.52±0.59	15.01	<0.001
Control group	44	6.93±0.70	6.55±0.73	2.643	0.011
t-value		1.930	14.05		
p-value		0.057	<0.001		
Group	N	Richards-Campbell Sleep Questionnaire Score		t-value	p-value
		Before Intervention	After Intervention		
Experimental group	42	48.93±3.10	50.33±4.41	-1.937	0.060
Control group	44	49.57±2.26	50.25±2.75	-1.686	0.099
t-value		1.097	-0.106		
p-value		0.276	0.916		

Discussion

Implementation of Narrative Nursing Humanistic Care Program Can Increase the Sense of Being Cared for

According to the findings of this study, after the intervention, the caring behavior score in the experimental group was significantly higher than that in the control group ($p < 0.001$), indicating that the narrative nursing-based humanistic care program effectively fostered an empathetic nurse-patient relationship and enhanced patients' perceived sense of being cared for during hospitalization.

Several factors contribute to these outcomes. A harmonious professional environment and a team-based caring atmosphere serve as foundational elements for strengthening humanistic care practices. Additionally, knowledge and skills training for healthcare professionals are essential for improving humanistic practice, while the establishment of a standardized humanistic care process provides a structured pathway for effective implementation.^{14,15}

To ensure quality in humanistic care practice, this intervention protocol involved the formation of a nurse-led, physician-assisted care team at the initial stage of implementation. Prior to the intervention, standardized training was provided to all participating healthcare professionals, ensuring consistency in learning and practice. Furthermore, the intervention was guided by an expert-reviewed protocol, ensuring its feasibility and adherence to best practices throughout the study.

Prior research demonstrated that nursing interventions involving the families of ICU patients contribute to improved patient health outcomes and effectively address emotional needs, thereby enhancing the perceived sense of being cared for, in the patients.¹⁶ In this study, the intervention was conducted within a framework involving medical staff, family members, and patients, which facilitated stronger psychological connections between patients and their families. This approach fostered a greater sense of belonging and positive emotional experiences, while also leveraging family support to help stabilize patients' emotions.

Additionally, during narrative-based interventions, patients were encouraged to reconstruct positive past experiences through storytelling techniques, incorporating principles from positive psychology to evoke intrinsic motivation for health behavior change. This approach alleviates fear and helplessness in unfamiliar clinical environments, further contributing to an enhanced sense of physical and psychological security.

Implementation of a Narrative Nursing Humanistic Care Program Improves Anxiety and Depression States and Reduces Psychological Distress Levels

The results from of this study demonstrated that, following the intervention, anxiety, depression, and psychological distress scores in the experimental group were significantly lower than those in the control group ($p < 0.05$). These results indicate that the narrative nursing-based humanistic care program contributed to a reduction in negative emotional experiences among conscious patients in the ICU.

Prior research reported that the incidence of anxiety and depression among patients in the ICU is 46% and 40%, respectively, and that these emotional states exacerbate psychological distress levels.¹⁷ Negative psychological experiences during hospitalization persist for months or even years after discharge. Even after physical recovery, psychological challenges often remain unresolved, highlighting the need for targeted interventions.

The findings from this study indicate that the narrative nursing humanistic care program effectively mitigated negative emotional responses. This outcome is attributed to several key aspects of the intervention. Throughout its implementation, staff identities were actively introduced, and timely attention was given to both physiological and psychological discomfort. Efforts were made to establish mutual trust and rapport with patients, utilizing both verbal and non-verbal communication techniques to foster engagement. Additionally, questions were answered with patience, while reasonable guidance and education were provided, and positive beliefs and reassurance were subtly conveyed through narrative-based interactions.

Existing evidence indicates that narrative nursing can reshape patients' self-perception, alleviate negative emotions and psychological distress, and support the development of positive psychological resources.¹⁸ Along with these principles, this study incorporated core techniques of narrative nursing, including externalization, deconstruction, rewriting, and external witnessing. By adopting a patient-centered approach, the intervention considered social, cultural, and familial backgrounds, allowing for a comprehensive exploration of the intrinsic strengths of patients. This approach helped amplify the internal resilience of patients, enabling them to confront challenges with a more proactive perspective on illness and life, while also enhancing their sense of familial and social support.

The Effect of Implementing Narrative Nursing Humanistic Care Program on Improving Patient Sleep Quality Is Not Significant

According to the findings of this study, sleep quality scores in the experimental group were higher than those in the control group following the intervention; however, the difference between the two groups was not statistically significant. Prior research established a strong correlation between sleep quality and emotional states, with a bidirectional influence.^{19,20} Negative emotions impair sleep quality, while a positive emotional state not only improves sleep but also encourages patients to maintain a proactive attitude toward treatment.

Despite the observed improvements in emotional and psychological states, a significant enhancement in sleep quality was not detected in this study. Several factors may contribute to this outcome. ICU patients present with diverse disease profiles and varying degrees of clinical severity, which lead to rapid condition fluctuations. Additionally, multiple factors influence sleep quality, including age, disease type, oxygen therapy methods, and the administration of sleep-promoting medications, sedatives, or analgesics.²¹

However, sleep remains a critical component of the recovery process, playing an essential role in both physical and psychological rehabilitation in patients who are critically ill. Furthermore, the narrative competence of nursing staff is an important factor influencing the effectiveness of narrative-based interventions. Nurses experience anxiety when addressing the negative emotional expressions of patients, which stem from heightened self-expectations regarding their own narrative skills.

According to the humanistic care management standardization group, a diverse, multi-pathway, and integrative approach to humanistic care should be implemented.²² Future research could examine classification-based approaches to sleep disorders in patients who are critically ill, adopting tailored, diversified intervention strategies based on specific sleep disorder types and severity levels. Such refinements could further optimize intervention protocols and enhance sleep quality outcomes in conscious patients in the ICU.

Limitations

However, this study also has some limitations: the implementation of single or double blind methods can reduce the measurement bias of this study and increase the reliability of the results. However, in order to minimize the additional burden on daily nursing work, this study was not blinded during the intervention process. In addition, at present, this study was only conducted in one ICU of a tertiary general hospital, and the sample representation was limited. In the future, multi-center and large-sample interventions will be carried out to further verify and improve this protocol.

Conclusion

The findings of this study indicate that the implementation of a humanistic care program based on narrative nursing theory can enhance the sense of being cared for, reduce anxiety, depression, and psychological distress, and contribute to both physical and psychological well-being of a patient. Additionally, this intervention improves quality of life and the overall medical experience during hospitalization. The program is simple, feasible, safe, and effective, making it suitable for clinical implementation and broader application.

Abbreviations

ICU, intensive care unit; PHQ-9, Patient Health Questionnaire-9; RCSQ, Richards-Campbell Sleep Questionnaire.

Data Sharing Statement

The datasets used and/or analyzed during the current study are available from the corresponding author upon reasonable request.

Ethics Approval and Consent to Participate

This study was conducted with approval from the Ethics Committee of Nantong First People's Hospital (No. 2022KT132). This study was conducted in accordance with the declaration of Helsinki. Written informed consent was obtained from all participants.

Acknowledgments

We would like to acknowledge the hard and dedicated work of all the staff who implemented the intervention and evaluation components of the study.

Funding

Nantong Science and Technology Program (MSZ2022094).

Disclosure

The authors declare that they have no competing interests in this work.

References

- Op 't Hoog SAJJ, Dautzenberg M, Eskes AM, Vermeulen H, Vloet LCM. The experiences and needs of relatives of intensive care unit patients during the transition from the intensive care unit to a general ward: a qualitative study. *Aust Crit Care*. 2020;33(6):526–532. PMID: 32089387. doi:10.1016/j.aucc.2020.01.004
- Schofield-Robinson OJ, Lewis SR, Smith AF, McPeake J, Alderson P. Follow-up services for improving long-term outcomes in intensive care unit (ICU) survivors. *Cochrane Database Syst Rev*. 2018;11(11):CD012701. PMID: 30388297; PMCID: PMC6517170. doi:10.1002/14651858.CD012701.pub2
- Vincent JL, Shehabi Y, Walsh TS, et al. Comfort and patient-centred care without excessive sedation: the eCASH concept. *Intensive Care Med*. 2016;42(6):962–971. PMID: 27075762; PMCID: PMC4846689. doi:10.1007/s00134-016-4297-4
- Ghanbari-Afra L, Adib-Hajbaghery M, Dianati M. Human caring: a concept analysis. *J Caring Sci*. 2022;11(4):246–254. PMID: 36483689; PMCID: PMC9720504. doi:10.34172/jcs.2022.21
- Xu J, Wu QY, Chen Y, et al. Expert consensus on humanistic care in the care of adult patients in intensive care units. *Hu Li Xue Za Zhi*. 2022;37(18):1–4.
- Hinyard LJ, Kreuter MW. Using narrative communication as a tool for health behavior change: a conceptual, theoretical, and empirical overview. *Health Educ Behav*. 2007;34(5):777–792. PMID: 17200094. doi:10.1177/1090198106291963

7. Hesse C, Rauscher EA. The relationships between doctor-patient affectionate communication and patient perceptions and outcomes. *Health Commun.* 2019;34(8):881–891. PMID: 29461101. doi:10.1080/10410236.2018.1439269
8. Wolf ZR, Giardino ER, Osborne PA, Ambrose MS. Dimensions of nurse caring. *Image J Nurs Sch.* 1994;26(2):107–111. PMID: 8063315. doi:10.1111/j.1547-5069.1994.tb00927.x
9. Spitzer RL, Kroenke K, Williams JB, Löwe B. A brief measure for assessing generalized anxiety disorder: the GAD-7. *Arch Intern Med.* 2006;166(10):1092–1097. PMID: 16717171. doi:10.1001/archinte.166.10.1092
10. Wang Y, Chn R, Zhang L. Reliability and validity of generalized anxiety scale-7 in inpatients of Chinese general hospitals. *Lin Chuang Jing Shen Yi Xue Za Zhi.* 2018;28(03):168–171.
11. Spitzer RL, Kroenke K, Williams JB. Validation and utility of a self-report version of PRIME-MD: the PHQ primary care study. *JAMA.* 1999;282(18):1737–1744. PMID: 10568646. doi:10.1001/jama.282.18.1737
12. Tang LL, Zhang YN, Zhang HW, SOng LL. Reliability and validity of psychological pain thermometer and its application in cancer patients in China, 2010:2.
13. Richards KC, O’Sullivan PS, Phillips RL. Measurement of sleep in critically ill patients. *J Nurs Meas.* 2000;8(2):131–144. PMID: 11227580. doi:10.1891/1061-3749.8.2.131
14. Yu XY, Wang HQ, Tang L, Pan S, Zhang L, Li JX. A qualitative study of humanistic care barriers and contributing factors in ICU nursing. *Chinese J Emerg Critical Care Nursing.* 2024;5(05):408–413.
15. Basile MJ, Rubin E, Wilson ME, et al. Humanizing the ICU patient: a qualitative exploration of behaviors experienced by patients, caregivers, and ICU staff. *Crit Care Explor.* 2021;3(6):e0463. PMID: 34151284; PMCID: PMC8208441. doi:10.1097/CCE.0000000000000463
16. Chen SJ, Feng HL, Wei CS, Qin RX, Ling M. Application of family-centered humanistic nursing in ICU patients. *Hu Li Yan Jiu Yu Shi Jian.* 2022;19(09):1322–1325.
17. Hatch R, Young D, Barber V, Griffiths J, Harrison DA, Watkinson P. Anxiety, depression and post traumatic stress disorder after critical illness: a UK-wide prospective cohort study. *Crit Care.* 2018;22(1):310. PMID: 30466485; PMCID: PMC6251214. doi:10.1186/s13054-018-2223-6
18. Cao H, Liu HF, He RL, et al. Study on the effect of narrative nursing to improve the pain of insulin injection in elderly type 2 diabetes patients in community. *Hu Li Guan Li Za Zhi.* 2024;24(02):98–102.
19. Zhang J, Shao S, Ye C, Jiang B. A clinical study of the effect of estradiol valerate on sleep disorders, negative emotions, and quality of life in perimenopausal women. *Evid Based Complement Alternat Med.* 2021;2021:8037459. doi:10.1155/2021/8037459
20. Soundararajan K, Prem V, Kishen TJ. The effectiveness of mindfulness-based stress reduction intervention on physical function in individuals with chronic low back pain: systematic review and meta-analysis of randomized controlled trials. *Complement Ther Clin Pract.* 2022;49:101623. PMID: 35779457. doi:10.1016/j.ctcp.2022.101623
21. Zhang Y, Zhang Y, Teng M, et al. Study on the sleep quality classification and influencing factors of adult ICU awake patients based on latent profile analysis: a cross-sectional survey. *Nat Sci Sleep.* 2023;15:861–871. PMID: 37928370; PMCID: PMC10625327. doi:10.2147/NSS.S430635
22. Wang ZR, Liu YL, Ding YM, et al. Interpretation of group standard of humanistic care management in ward nursing. *Hu Li Xue Za Zhi.* 2024;39(14):91–94.

Journal of Multidisciplinary Healthcare

Publish your work in this journal

The Journal of Multidisciplinary Healthcare is an international, peer-reviewed open-access journal that aims to represent and publish research in healthcare areas delivered by practitioners of different disciplines. This includes studies and reviews conducted by multidisciplinary teams as well as research which evaluates the results or conduct of such teams or healthcare processes in general. The journal covers a very wide range of areas and welcomes submissions from practitioners at all levels, from all over the world. The manuscript management system is completely online and includes a very quick and fair peer-review system. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Submit your manuscript here: <https://www.dovepress.com/journal-of-multidisciplinary-healthcare-journal>

Dovepress
Taylor & Francis Group