

Meta-analysis of the Impact of Narrative Care on the Quality of Life of Critically Ill Patients

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Abstract: Objective To systematically evaluate the effect of narrative care on the quality of life of critically ill patients. Methods Computer searches of PubMed, Web of Science, Embase, ProQuest, Wiley, CNKI, Wanfang database for randomized controlled trials on the effects of narrative care on the psychological and quality of life of seriously patients were conducted, and the search time frame was from database creation to December 2022. The literature was screened, extracted, and evaluated for methodological quality by two investigators according to inclusion and exclusion criteria. The quality of the literature was evaluated using the Jadad scale, and the risk of bias was assessed by the recommended criteria in the Cochrane 5.1.0 manual. The data were extracted from the literature that met the inclusion criteria after screening. Meta-analysis was performed using RevMan 5.4. Results The final literature included 32 articles with 3073 patients. Meta-analysis results showed that narrative care was effective in improving patients' quality of life, including physical and psychological dimensions, compared with conventional care. Conclusions Narrative care helps to improve the psychological status and quality of life of seriously patients, with important implications for both physical and psychological dimensions.

Keywords: Narrative Nursing; Seriously Patients; Mental State; Quality of Life; Meta-analysis.

1. Introduction

With the rapid development of critical care medicine, the mortality rate of critically ill patients has been significantly reduced, and the number of patients transferred from the ICU has increased significantly [1]. After the transfer of critically ill patients out of ICU, 25%-64% of patients will cause stress reactions that induce or aggravate psychological, physiological and cognitive dysfunctions, i.e., Post-ICU Syndrome (PICS) [2], and this condition will cause various negative impacts on the patients who have been transferred out of ICU, such as inability to reintegrate back into the society and increase the economic burden of the family, which will result in the deterioration of the quality of life of the patients [3]. Therefore, it is necessary to implement scientific and reasonable nursing measures to remodel the physical and mental health of patients and improve their quality of life. Narrative nursing was proposed by American professor Rita Charon in 2001, the essence of which is "humanistic return to medicine", even if the patient's physiological level, psychological level, spiritual level and social level of needs are satisfied [4]. Narrative nursing can improve the quality of life of critically ill patients to a certain extent, and its effect has been proved by research [5]. At present, narrative nursing has not been carried out for a long time in China, and the existing research object groups are mainly concentrated in cancer patients and terminal patients, and there is a relative lack of narrative nursing research in other directions, and there are differences in the form and content of nursing, and a unified standard has not been established. There are differences in the results of the research on narrative nursing, and the sample size is small, resulting in the impact of narrative nursing on the quality of life of critically ill patients has not been fully studied [6]. Therefore, this study evaluated the impact of narrative care on the quality of life (QOL) of critically ill patients through Meta-analysis, aiming to provide an evidence-based basis for clinical interventions and

guidance for a sound narrative care model in the future.

2. Objects and Methods

2.1. Inclusion and Exclusion Criteria

Regarding the inclusion and exclusion criteria of the literature, it should be completed with strict reference to the Cochrane 5.1.0 manual [7].

2.1.1. Inclusion Criteria

1) Study subjects: critically ill patients with different degrees of organ dysfunction. 2) Study type: randomized controlled trial (RCT). 3) Intervention: describe the intervention program, while adopting conventional nursing mode for the control group and conventional nursing + narrative nursing mode for the intervention group. 4) Outcome indicators: quality of life, the measurement tools were adopted from the Short Form of Health Survey (SF-36) [8] and the European Five-Dimensional Health Scale (EQ-5D) [9]. 5) The languages were Chinese and English.

2.1.2. Exclusion Criteria

1) Literature with missing relevant data, unclear content and very significant errors cannot be included in the group; 2) Repeatedly published literature, i.e., the same study published by the same author through many channels; 3) Notification and review studies; 4) Non-Chinese and English literature; 5) The results of the study could not be transformed into the same outcome index.

2.2. Literature Search Strategy

On the basis of the "PICOS" principle, the search strategy was clarified by referring to the relevant standards mentioned in the Cochrane 5.1.0 manual. For Chinese databases such as China Knowledge Network and Wanfang Data Knowledge Service Platform, the search formula was set as: ("Narrative care" OR "Narrative intervention" OR "Narrative therapy") AND ("quality of life" OR "quality of survival"); searching English databases such as PubMed, Web of Science, Embase,

ProQuest, Wiley, as well as RCTs and other clinical research registry networks, the English search formula was: ("narrative care" OR "narrative intervention" OR "narrative therapy ") AND ("quality of life" OR "quality of survival"), and the timeframe for all searched documents was from the establishment of the database to December 31, 2022, and were searched using a combination of subject and free words. After adding references to the literature or other sources of reviews and Meta-analyses, the literature required for this experiment was supplemented to minimize the cases of missed detection.

2.3. Literature Screening and Extraction

With Reference to the Established Criteria for Inclusion And ranking, 2 researchers are responsible for screening the literature, while completing the extraction of information and taking cross-checking treatment, in the case of disagreement, a third researcher needs to be introduced to finalize the consultation. In case of missing data, every effort should be made to contact the authors to improve the content. Data extraction was carried out on the literature obtained after 2 screenings, and the table was completed at the same time, and the extracted data involved the basic information of the included literature, the specific content of the interventions, the characteristics of the experimental subjects, the core factors of the risk of bias measurement, and the outcome indicators.

2.4. Literature Quality Evaluation

Based on the criteria for assessing risk of bias mentioned in the Cochrane Handbook, two researchers independently evaluated the risk of bias of the included literature, and if there was a difference of opinion, a third researcher was introduced to analyze the quality of the literature and finally decide the evaluation level. The three parties jointly determined the level of quality assessment of the literature. Each included study was evaluated individually according to the Cochrane Risk Assessment Tool; if all seven entries were low risk of bias, it was graded as A, if some of them were not, it was graded as B, and if all of them were not, it was graded as C. The quality of the literature was assessed by a modified Jadad scale. The quality of the literature was assessed using the modified Jadad scale [10]. The quality assessment tool of the modified Jadad scale is to score the random sequence formation pathway, the hidden form of randomization, the implementation of blinding or not, and the reporting of loss of visits and dropouts or not, with a total of 7 points, with low and high quality corresponding to scores ranging from 0 to 3 and from 4 to 7, respectively.

2.5. Statistical Methods

The tool utilized for the Meta-analysis session was RevMan 5.4 software, provided by the Cochrane Collaboration. The results of this study were continuous variables, so weighted mean difference (WMD) was taken as the effect size, describing 95% confidence intervals (95% CI). Heterogeneity of the included studies was examined using the x^2 test with I^2 , if $P > 0.05$ and $I^2 < 50\%$, it means that there is some homogeneity in the results, and the meta-analysis was conducted using the fixed-effects model (FEM); if $P < 0.05$ or less, and $I^2 > 50\%$, it means that there is some heterogeneity, and then the meta-analysis was conducted using the random-effects model (REM). For the same set of data, Meta-analysis was carried out again via different effect models and

sensitivity analysis was carried out by excluding heterogeneity from the literature one by one, in order to get the influence of small sample study effect on the reliability of Meta-analysis.

3. Results

3.1. Literature Screening Results

In accordance with the search program, after the initial examination of the database, a total of 2526 relevant studies were obtained, and no relevant studies were obtained from other resource supplements. After further review, 32 studies [11-42] met all inclusion criteria, totaling 3073 patients. Among them, there was 1 English-language literature and 31 Chinese-language literature. The flowchart of the literature search process is shown in Figure 1 (Literature Screening Flowchart).

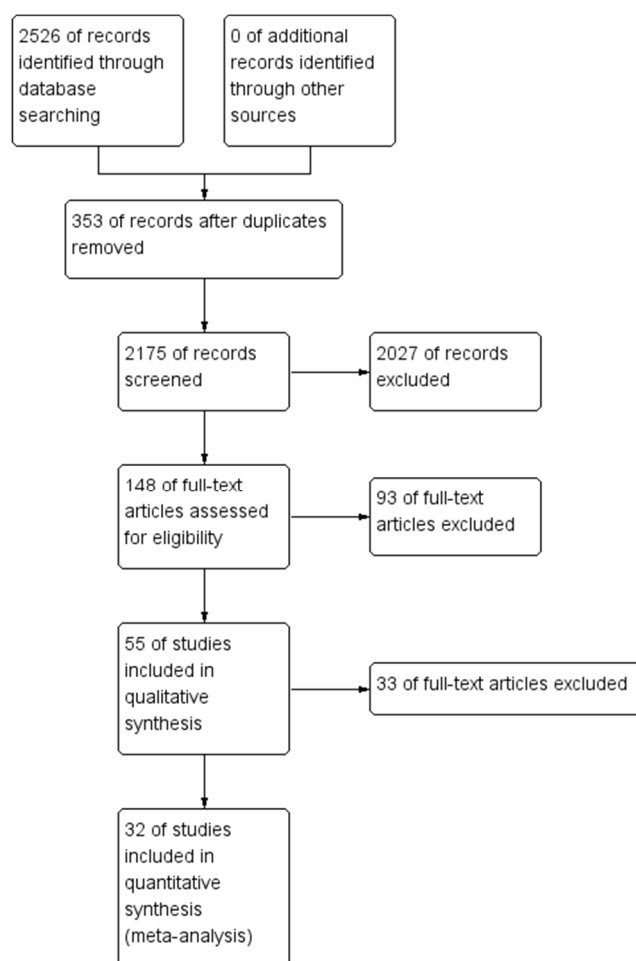


Figure 1. Literature screening flowchart

3.2. Basic Characteristics of the Included Literature

The basic information of the literature enrolled in this study can be seen through Table 1. A total of 32 literatures were included, with a sample size between 10-108 and a total of 3073 patients. The years of publication of the literature were 2018-2022, and the literature published after 2020 totaled 25 articles, accounting for 73.5%. The interventions were comprehensively described in the literature, and very clear outcome indicators existed in all of them. Comparative analyses of baseline values between the control and experimental groups were conducted, and the results were comparable.

Table 1. Basic characteristics of the included literature

Include	Year	sample size	Methods of intervention		outcome indicator	Measuring Tools
		(Intervention/control group)	Intervention	control group		
Han et al[12]	2022	34/34	Narrative care	general nursing	quality of life	SF-36
Hu et al[13]	2022	40/40	Narrative care	general nursing	quality of life	SF-36
Jiang et al[16]	2022	50/50	Narrative care	general nursing	quality of life	SF-36
Liu et al[21]	2022	40/40	Narrative care	general nursing	quality of life	SF-36
Li et al[22]	2022	60/60	Narrative care	general nursing	quality of life	SF-36
Li et al[23]	2022	40/40	Narrative care	general nursing	quality of life	SF-36
Luo et al[25]	2022	33/33	Narrative care	general nursing	quality of life	SF-36
Liu et al[27]	2022	56/56	Narrative care	general nursing	quality of life	SF-36
Liu et al[28]	2022	45/45	Narrative care	general nursing	quality of life	SF-36
Shi et al[32]	2022	49/46	Narrative care	general nursing	quality of life	SF-36
Wang et al[34]	2022	81/81	Narrative care	general nursing	quality of life	SF-36
Zhang et al[40]	2022	34/34	Narrative care	general nursing	quality of life	SF-36
Cheng et al [11]	2021	43/43	Narrative care	general nursing	quality of life	SF-36
Jiang et al[17]	2021	39/39	Narrative care	general nursing	quality of life	SF-36
Li et al[20]	2021	65/55	Narrative care	general nursing	quality of life	SF-36
Lu et al[24]	2021	60/60	Narrative care	general nursing	quality of life	SF-36
Shao et al[30]	2021	108/102	Narrative care	general nursing	quality of life	SF-36
Shi et al[31]	2021	60/60	Narrative care	general nursing	quality of life	SF-36
Wang et al[35]	2021	35/35	Narrative care	general nursing	quality of life	SF-36
Wu et al[36]	2021	45/45	Narrative care	general nursing	quality of life	SF-36
Xia et al[37]	2021	51/51	Narrative care	general nursing	quality of life	SF-36
Zhao et al[38]	2021	50/50	Narrative care	general nursing	quality of life	SF-36
Zhang et al[39]	2021	56/56	Narrative care	general nursing	quality of life	SF-36
Jalal et al [14]	2020	16/10	Narrative care	general nursing	quality of life	SF-36
Jiang et al[15]	2020	45/45	Narrative care	general nursing	quality of life	SF-36
Jiang et al[19]	2019	60/60	Narrative care	general nursing	quality of life	SF-36
Li et al[26]	2019	40/40	Narrative care	general nursing	quality of life	SF-36
Wang et al[33]	2019	36/36	Narrative care	general nursing	quality of life	SF-36
Ma et al[29]	2018	46/40	Narrative care	general nursing	quality of life	SF-36
Jiang et al[18]	2018	45/45	Narrative care	general nursing	quality of life	SF-36
Zhao et al[41]	2018	61/61	Narrative care	general nursing	quality of life	SF-36
Zhou et al[42]	2012	29/29	Narrative care	general nursing	quality of life	SF-36

3.3. Literature Quality Assessment

Fourteen of the 32 included RCTs [12-16,18-19,21-22,24,26-28,30,40] had a modified Jadad score greater than 4, which is considered high quality literature, and the rest were considered low quality literature. All 32 RCTs reported on the baseline conditions of the patients, and 15 of them [12, 14-16, 18-19, 21-22 ,24,26-28,330,39,40] accounted for the specific randomization method and the method was reasonable, whereas 9 RCTs [11,17,29,32-33,35-36,38,42], although accounting for the specific randomization method, were shown to be unreasonable in terms of their use of the method because of following the single and double numbers, admission number, order of attendance, and length of hospitalization, and the other 8 [13,20, 23,25,31,34,37,41] were RCTs but did not describe the method of random allocation; 2 RCTs [16,38] reported on allocation concealment schemes, 14 RCTs [12, 1-15, 18-19, 21-22, 24, 26-28, 30, 39, 40] only indicated the use of random number tables, and the rest did not report on allocation concealment schemes; 1 RCT used a double-blind method but did not describe the exact method in detail, the rest of the RCTs were not double-blind, as subjects could not be blinded to the intervention; 2 RCTs [14,16] described the number of and reasons for loss of visits or dropouts, the rest did not have any loss of visits or dropouts. The methodological quality assessment of the enrolled literature revealed that the quality grade of the enrolled studies was B. This is shown in Table 2

and Table 3. The following figure shows the results of the Cochrane analysis of bias in the enrolled studies. See Figure 2.

3.4. Meta-analysis of the Effect of Narrative Care on Quality of Life of Critically Ill Patients

SF-36 was used as an assessment tool in all 32 literatures [11-42]. Heterogeneity test was performed on the included literature [11-42], of which eight [14,22,26,28-29,33-34,38] assessed the overall quality of life, i.e., the SF-36 total score, of critically ill patients. The results of the Meta-analysis showed that the total quality of life score of the critically ill patients of the intervention group of one RCT [14] was not significantly different from that of the control group, which may be related to its small sample size. The remaining seven [22,26,28-29,33-34,38] showed that the total quality of life scores of critically ill patients in the intervention group were higher than those of the control group, which was different ($P < 0.05$), as shown in Table 4 and Fig. 3. Another 24 papers [11-13,15-21,23-25,27,30-32,35-37,39-42] assessed each of the SF-36 Meta-analysis showed that the scores of each dimension of quality of life of critically ill patients in the intervention group were higher than those of the control group, and the difference was statistically significant ($P < 0.05$). The difference was statistically significant ($P < 0.05$). See table 5.

Table 2. Results of quality assessment of the included literature

Included	Randomized approach	Assignment hiding	Blinding	Base line	Lost Visits and Withdrawals	Jadad	Quantity
Chen et al[11]	Date of admission	Unclear	Unclear	concordance	0	2	Low
Han et al[12]	Random number table system (RNT)	Unclear	Unclear	concordance	0	4	High
Hu et al[13]	Unclear	Unclear	Unclear	concordance	0	3	Low
Jalal et al[14]	RNT	Unclear	Unclear	concordance	14	5	High
Jiang et al[15]	RNT	Unclear	Unclear	concordance	0	4	High
Jiang et al[16]	Randomization method	lottery	Unclear	concordance	1	6	High
Jiang et al[17]	Date of admission	Unclear	Unclear	concordance	0	2	Low
Jiang et al[18]	RNT	Unclear	Unclear	concordance	0	4	High
Jiang et al[19]	RNT	Unclear	Unclear	concordance	0	4	High
Li et al[20]	Unclear	Unclear	Unclear	concordance	0	3	Low
Liu et al[21]	RNT	Unclear	Unclear	concordance	0	4	High
Li et al[22]	RNT	Unclear	Unclear	concordance	0	4	High
Li et al[23]	Unclear	Unclear	Unclear	concordance	0	3	Low
Lu et al[24]	RNT	Unclear	Unclear	concordance	0	4	High
Luo et al[25]	Unclear	Unclear	Unclear	concordance	0	3	Low
Li et al[26]	RNT	Unclear	Unclear	concordance	0	4	High
Liu et al[27]	RNT	Unclear	Unclear	concordance	0	4	High
Liu et al[28]	RNT	Unclear	Unclear	concordance	0	4	High
Ma et al[29]	Length of hospitalization	Unclear	Unclear	concordance	0	2	Low
Shao et al[30]	RNT	Unclear	Unclear	concordance	0	4	High
Shi et al[31]	Unclear	Unclear	Unclear	concordance	0	3	Low
Shi et al[32]	dialysis duration	Unclear	Unclear	concordance	0	2	Low
Wang et al[33]	odd or even numbered	Unclear	Unclear	concordance	0	2	Low
Wang et al[34]	Unclear	Unclear	Unclear	concordance	0	3	Low
Wang et al[35]	Date of admission	Unclear	Unclear	concordance	0	2	Low
Wu et al[36]	Admission Number	Unclear	Unclear	concordance	0	2	Low
Xia et al[37]	Unclear	Unclear	double-blind	concordance	0	3	High
Zhao et al[38]	medical order	Convenience sampling	Unclear	concordance	0	1	High
Zhang et al[39]	RNT	Unclear	Unclear	concordance	0	3	Low
Zhang et al[40]	RNT	Unclear	Unclear	concordance	0	4	High
Zhao et al[41]	Unclear	Unclear	Unclear	concordance	0	3	Low
Zhou et al[42]	Outpatient log numbers and clinic hours	Unclear	Unclear	concordance	0	2	High

3.5. Sensitivity Analysis of the Effect of Narrative Care on Quality of Life of Critically Ill Patients

Because of the high heterogeneity ($P < 0.05$) in the total quality of life scores [14,22,26,28,29,33,34,38] and the scores of the dimensions [11-13,15-21,23-25,27,30-32,35-37,39-42] of critically ill patients among the included studies, sensitivity analyses were performed for all of them. Regarding the total quality of life scores of critically ill patients [14,22,26,28,29,33,34,38], for the same set of values, the results of the re-Meta analysis carried out by different effect models showed that there was less difference after the data effect models were interchanged, i.e., the random effect model WMD = 8.66, 95% CI (4.35, 12.98), $P < 0.0001$, and the fixed effect model WMD = 8.66, 95% CI (4.35, 12.98), $P < 0.0001$, respectively. Fixed effects model WMD = 7.42, 95%

CI (6.61, 8.22), $P < 0.00001$, indicating that the sensitivity of the above information is not high, i.e., small-sample study effects do not affect the combined effect size to a greater extent, and the results of Meta-analysis data possess good stability. Heterogeneity was excluded for each dimension of quality of life of heavy patients using the method of excluding the literature one by one. After excluding the corresponding literature, the heterogeneity of the included studies [11-13,15-21,23-25,27,30-32,35-37,39-42] was examined, and it was found that the heterogeneity was reduced, with $P < 0.05$, and analyzed by the random-effects model. The results of the Meta-analysis did not change significantly compared with those of the pre-exclusion period, which made the results more robust and reliable. The higher heterogeneity may stem from the differences in sample size and quality of the literature of the included studies, and the exclusion of the literature had the problems of not being randomly assigned and not being able to implement the blinding method. The

results of the sensitivity analysis are shown in Figure 4 and Table 6.

Table 3. Evaluation of methodological quality of included studies

Included	Blinding							quality level
	Random Sequence Generation	Allocation concealment	Blinding of participants and personnel	Blinding of outcome assessment	Incomplete outcome data	Selective reporting	Other bias	
Chen et al[11]	High risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Han et al[12]	Low risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Hu et al[13]	Unclear	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Jalal et al[14]	Low risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Jiang et al[15]	Low risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Jiang et al[16]	Low risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Jiang et al[17]	High risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Jiang et al[18]	Low risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Jiang et al[19]	Low risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Li et al[20]	Unclear	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Liu et al[21]	Low risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Li et al[22]	Low risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Li et al[23]	Unclear	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Lu et al[24]	Low risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Luo et al[25]	Unclear	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Li et al[26]	Low risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Liu et al[27]	Low risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Liu et al[28]	Low risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Ma et al[29]	High risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Shao et al[30]	Low risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Shi et al[31]	Unclear	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Shi et al[32]	High risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Wang et al[33]	High risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Wang et al[34]	Unclear	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Wang et al[35]	High risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Wu et al[36]	High risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Xia et al[37]	Unclear	Unclear	Low risk	Low risk	Low risk	Low risk	Low risk	B
Zhao et al[38]	High risk	Low risk	Unclear	Unclear	Low risk	Low risk	Low risk	B
Zhang et al[39]	Low risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Zhang et al[40]	Low risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Zhao et al[41]	Unclear	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B
Zhou et al[42]	High risk	Unclear	Unclear	Unclear	Low risk	Low risk	Low risk	B

4. Discussion

4.1. Methodological Quality of the Literature Included in this Study

Of the 32 papers included in this study [11-42], the quality of the literature was of grade B. All the papers had clearly defined the criteria for the inclusion and exclusion of subjects. All of the literature specified the inclusion and exclusion criteria indicators for the subjects, and two studies [14,16] described the status of loss of visit and withdrawal, while there was no difference in the baseline. There was variability in the results of the literature used, allowing for a reduction in publication bias. The literature selected was all RCTs, with

this making confounding factors less intrusive. Allocation concealment enabled a reduction in selective bias, and blinding prevented biased conditions in the study originating from both subjects and researchers. In the relevant literature, 14 [12,14,15,18-19,21-22,24,26-28,30,39,40] reported specific randomization methods, 2 [16,38] reported allocation concealment, and 1 study [37] was double-blind. Overall, this study had high quality of literature, and also performed well in bias control, with acceptable level of risk and high confidence in the findings.

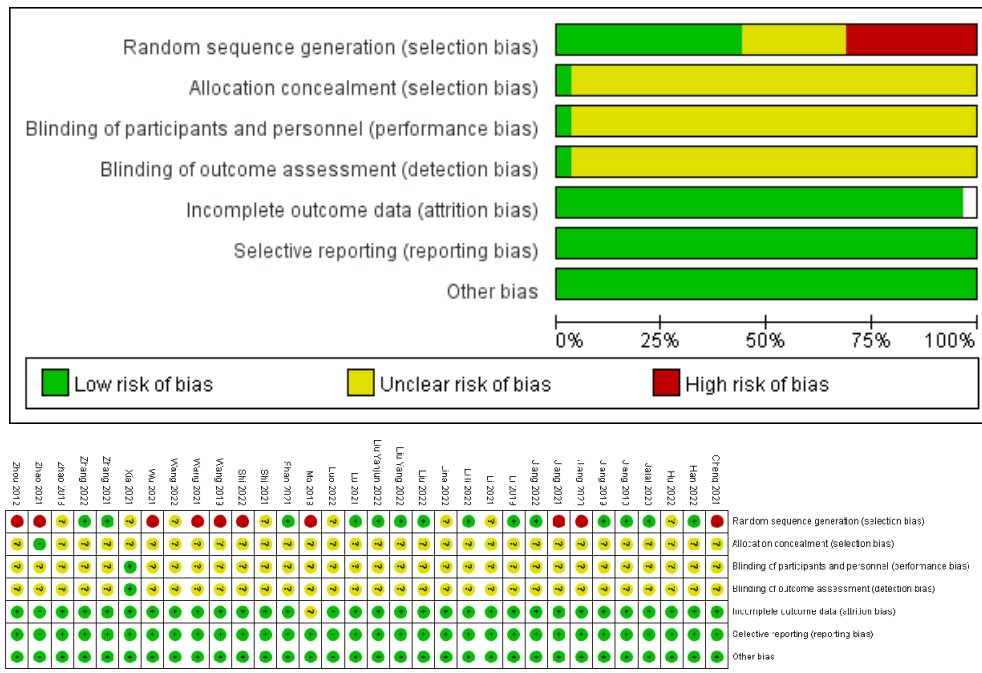


Figure 2. Cochrane risk of bias assessment diagram

Table 4. Meta-analysis of the impact of narrative care on the overall quality of life of critically ill patients

Included	Heterogeneity test (p-value)	Sample size		Weights Mean Difference	95% confidence interval	Z value
		Intervention group	Control group			
Jalal [14]	0.09	16	10	1.64	[-0.24,3.52]	1.71
Liu[28]	<0.00001	45	45	13.8	[10.92,15.44]	11.43
Li[26]	<0.00001	40	40	7.49	[5.37, 9.61]	6.94
Li[22]	0.0005	60	60	4.16	[1.83, 6.49]	3.5
Wang[33]	0.002	36	36	6.3	[2.33, 10.27]	3.11
Wang[34]	<0.00001	81	81	11.08	[8.58, 13.58]	8.69
Zhao[38]	<0.00001	50	50	22.13	[19.25,25.01]	15.05
Ma[29]	<0.0001	46	40	3.6	[1.81, 5.39]	3.94

Table 5. Meta-analysis of the effect of narrative care on the dimensions of quality of life in critically ill patients

Event	Included	Heterogeneity test (p-value)	Sample size		Weights Mean Difference	95%CI	Z	P
			Intervention group	Control group				
Physiological Function	23	<0.00001	1122	1103	8.66	[5.46,11.86]	5.3	<0.00001
Physiologic function	20	<0.00001	934	915	12.5	[7.25,17.75]	4.67	<0.00001
Bodily Pain	19	<0.00001	934	915	8.84	[5.44,12.24]	5.1	<0.00001
General Health	20	<0.00001	971	952	9.9	[6.02,13.79]	4.99	<0.00001
Vitality	16	<0.00001	867	842	12.37	[7.37,17.37]	4.85	<0.00001
Social Functioning	24	<0.00001	1178	1159	9.16	[6.30,12.02]	6.28	<0.00001
Emotional functioning	19	<0.00001	994	975	11.61	[7.59,15.63]	5.66	<0.00001
Mental Health	24	<0.00001	1178	1159	13.14	[9.25,17.04]	6.62	<0.00001

4.2. Narrative Nursing Can Improve Patients' Quality of Life

The data of the results of this study show that compared with the conventional care control group, narrative nursing can well enhance the SF-36 scale scores of critically ill

patients and improve their living conditions, which is consistent with the results of the systematic evaluation of Huang Hui [43] et al. In addition, this study found that critically ill patients in the intervention group improved significantly in both psychological and physiological dimensions, which shows that narrative nursing can not only

satisfy the basic physiological needs of patients, but also establish positive psychological defenses for patients, and satisfy the needs of patients at the psychological level through witnessing, empathy, and mutual acceptance, which suggests

that narrative nursing is a respectful, empathetic, and vitalizing. This suggests that narrative care is a care model that is full of respect, empathy, and vitality, "reaching from the body to the mind".

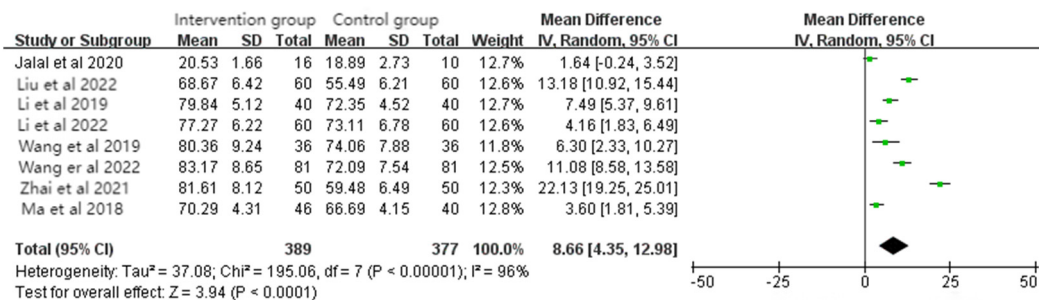


Figure 3. Forest plot of the overall effect of narrative care on quality of life of critically ill patients

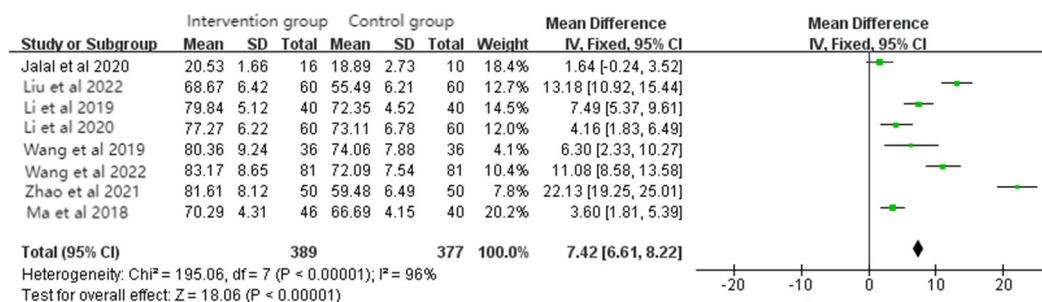


Figure 4. Sensitivity analysis of the overall impact of narrative care on the quality of life of critically ill patients

Table 6. Sensitivity analysis of the effect of narrative care on the dimensions of quality of life in critically ill patients

SF-36 Dimension	Exclusion of literature	Heterogeneity test		confluence effect size	
		I ² (%)	P	Weights Mean Difference	95%CI
Physiological Function	Shi[32],Li[23],Shi[31],Hu[13],Jiang[18]	98	<0.00001	8.35	[4.66, 12.04]
Physiologic function	Shi[32],Li[23],Shi[31],Hu[13],Jiang[18]	99	<0.00001	12.94	[7.03, 18.86]
Bodily Pain	Shi[32],Li[23],Shi[31],Hu[13],Jiang[18]	98	<0.00001	8.85	[5.10, 12.61]
General Health	Shi[32],Li[23],Shi[31],Hu[13],Jiang[18]	98	<0.00001	8.78	[4.82, 12.73]
Vitality	Shi[32],Li[23],Shi[31],Hu[13],Jiang[18]	99	<0.00001	13.65	[3.19, 24.12]
Social Functioning	Shi[32],Li[23],Shi[31],Hu[13],Jiang[18]	97	<0.00001	9.09	[6.06, 12.13]
Emotional functioning	Shi[32],Li[23],Shi[31],Hu[13],Jiang[18]	98	<0.00001	12.03	[7.79, 16.26]
Mental Health	Shi[32],Li[23],Shi[31],Hu[13],Jiang[18]	99	<0.00001	13.76	[7.79, 16.26]

Narrative care can improve patients' living conditions and meet their basic needs to a certain extent, but the time of intervention varies, and the results are not entirely consistent, and in-depth research is needed to demonstrate this. Among the 32 studies selected, some of them mentioned that, comparing with the conventional care group, the disease knowledge rate and self-intervention awareness of the narrative care group were significantly improved, which was consistent with the findings of Zhang Xiaoyi [44] and others. In addition, if the quality of life of patients is not substantially improved, it will lead to the elevation of the risk of patient anxiety [35], and in the process of rehabilitation, the anxiety of patients will also have a negative impact, which is not conducive to the return of patients to normal social life as soon as possible. Therefore, in the nursing process, healthcare professionals should focus on anxiety and implement relevant interventions to reduce patients' anxiety and improve their quality of life.

4.3. Limitations of this Study and Future Perspectives

Because Meta-analysis is a summary and secondary analysis of the results of multiple RCTs, there is bound to be some bias in the process of experimental design, data collection, and statistical analysis, and human bias in the methodological assessment of the quality of the studies, there are some limitations in the inclusion of the literature in the current Meta-analysis: (1) the sample size of most of the included literature is small, and the quality of some of the literature is (1) The sample size of most of the included literature was small, and the quality of some of the literature was low; (2) Due to the limitations of the study population, some of the literature was inappropriately randomized and blinded; (3) Some of the studies did not mention the pre-intervention quality of life scores, which is not rigorous; (4) There was a publication bias in the present study; and (5)

There was a heterogeneity in some of the endpoints, which may be due to the differences in the content, duration, and frequency of the narrative nursing care in the enrolled literature.

It is recommended that large-scale, multicenter, higher-quality RCTs be conducted in the future to analyze the narrative care model and content that can meet the needs of critically ill patients, to significantly improve the QOL of these patients, and to provide more evidence-based support for the establishment of narrative care protocols for them.

5. Summary

Narrative nursing can improve the quality of life of critically ill patients. Narrative nursing has certain benefits on the intervention effect of both physical and psychological dimensions. When human and material resources are available, healthcare professionals should establish targeted, systematic and scientific narrative care based on the objective condition and psychological state of the patient, and at the same time should pay attention to the prognosis of critically ill patients.

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