# The Influence Of The Integrated Nursing Of Knowledge, Faith And Practice On The Improvement Of Mood And Quality Of Life Of Patients With Severe Depression

Wei-xin Zhang<sup>1</sup>, Yan Zhang<sup>1</sup>, Li-mei Guo<sup>1</sup>, Yuan-yuan Gui<sup>1</sup>, Hong-liang Huo<sup>2</sup> and Chun-miao Xu<sup>1\*</sup>

<sup>1</sup>Qiqihar Medical University Nursing Department, Heilongjiang, China

<sup>2</sup>Fourth Affiliated Hospital of Qiqihar Medical College, Heilongjiang, China

Corresponding author Email: xcmhlxy@163.com

**Keywords:** Major Depression; Knowledge; Trust And Banking Integrated Nursing; Improved Mood; Quality Of Life

Abstract: Objective: To study the influence of KAP nursing on the improvement of mood and quality of life in patients with major depression. Methods: 85 patients with major depression admitted to our hospital from December 2019 to June 2020 were included in the study. According to the random number table method, they were divided into study group (42 patients) and control group (43 patients). The control group carried out routine nursing intervention, and the study group carried out KAP nursing intervention. The changes of depression severity, quality of life, self-efficacy and satisfaction before and after intervention were compared between the two groups. Results: HAMD scores of the two groups were significantly lower after intervention than before, and the study group was lower than the control group (all P < 0.05). After intervention, the quality of life scores of the two groups were significantly higher than that before intervention, and the study group was higher than the control group (all P < 0.05). Overall satisfaction of the study group was higher than that of the control group (P < 0.05). GSES scores of the two groups were significantly higher after intervention than before, and the study group was higher than the control group (both P< 0.05). Conclusion: KAP nursing has obvious effect in severe patients, which can improve patients' negative emotions to a certain extent, and improve patients' quality of life and self-efficacy, and has higher clinical promotion and application value.

Depression is a common mood disorder in clinic. Its main manifestation features include the persistent depression of patients' mood and loss of interest, as well as slow thinking. In severe cases, suicidal tendencies and suicidal behaviors may even occur, which will have a greater impact on patients' physical and mental health [1-2]. Clinical nursing plays a positive role in improving the cure rate and quality of life of patients with depression, and its role is becoming increasingly prominent. Therefore, it is particularly important to find an active and effective nursing program for the treatment and intervention of patients with such diseases [3]. Knowledge, Attitude, Practice (KAP) is one of the nursing modes developed in recent years. Based on knowledge and motivated by belief, KAP divides patients' behavior change into three successive processes: knowledge acquisition, belief generation and behavior formation, so as to provide all-round nursing services, including physiological, psychological and social, for patients, which has great nursing intervention value [4-5]. In the past, KAP nursing interventions were often applied in the adjuvant treatment of other diseases, which also achieved good application results, but there were few studies on the intervention level of depression patients. In view of this, this paper aims to provide an effective nursing program for patients with severe depression by studying the impact of KAP nursing on mood improvement and quality of life of patients with severe depression and comparing and analyzing it scientifically, so as to better serve patients with such diseases. The following reports are presented.

# 1. Objects and methods

DOI: 10.38007/Proceedings.0001554 -408- ISBN: 978-1-80052-010-3

## 1.1 General information

Eighty-five patients with severe depression admitted to the Fourth Affiliated Hospital of Qiqihar Medical College from December 2019 to June 2020 were included in the study, and they were divided into study group (42 cases) and control group (43 cases) according to random number table method. There were 24 males and 18 females in the study group. Age (38.44±2.39) years. The course of disease was (2.05±0.12) years. There were 26 males and 17 females in the control group. Age (38.62±2.47) years. The course of disease was (2.07±0.13) years. Inclusion criteria: (1) All subjects were in accordance with the diagnostic criteria for major depression formulated in the Chinese Classification and Diagnostic Criteria for Mental Disorders (Third Edition) [6]; (2) age > 20 years; (3) no relevant treatment had been received before admission. Exclusion criteria: (1) those with abnormal mind or neurological disorders; (2) those who are participating in other researchers; (3) those who withdrew or were lost to follow-up due to various reasons during the study. All subjects were informed and signed consent, which was approved by the hospital ethics committee.

#### 1.2 Research methods

Routine nursing intervention was carried out for patients in the control group, which mainly included active communication with patients, targeted psychological counseling according to the real thoughts of patients, but no special intervention was given during the conversation with them, only corresponding suggestions and support were given. The research group carried out KAP nursing intervention, the specific contents are as follows: (1) Cognitive intervention: nursing staff strengthened communication with patients, and clarified the main psychological problems of patients by analyzing the conversation content, and provided targeted nursing intervention to analyze the causes and mechanisms of abnormal psychology for patients. At the same time, help patients to alleviate their negative emotions scientifically, and ensure the gentleness of language and patience of attitude, so as to promote patients to face with a more positive attitude. At the same time, patients or their family members are required to regularly invite relatives and friends to gather and communicate actively, to evaluate the patients' grasp of their own disease-related knowledge, and to timely correct the patients' misunderstandings and thoughts. And explain in detail the relevant knowledge of disease and treatment intervention, and when necessary, consider conducting expert knowledge lectures and other ways to popularize relevant knowledge for patients. Help patients to relax themselves from their own thoughts, maintain their ideal physical and psychological state, and improve their self-management ability. In addition, explain the necessity of taking medicine according to the doctor's advice in detail to patients, and inform them of the negative impact that non-compliance with the doctor's advice may have on their disease, so as to help them clarify the importance of following the doctor's advice.(2) Belief-forming intervention: sharing experience and communicating experience for patients with better intervention effect, and setting a good example for patients. To develop corresponding health knowledge brochures and paste relevant health knowledge posters on hospital bulletin boards, ward corridors and wards. At the same time, patients can regularly push disease control knowledge through Wechat public numbers and other platforms. Nurses are required to guide patients with encouraging language and positive attitude as much as possible in the daily care process. At the same time, the frequency and time of companionship should be increased to help patients build up positive optimism and win-win belief in overcoming disease in a subtle atmosphere. For patients with poor intervention effect, strengthen communication, grasp potential incentives affecting intervention effect, and provide targeted guidance. On the basis of the above intervention measures, another "nurse-patient-family member" condition communication group is established to enable patients to experience care and support, and to establish a positive and optimistic psychological state as far as possible. (3) Behavioral intervention: Nursing staff should closely supervise the patients during the implementation of nursing to ensure that they take the medicine in drinking water on time and in quantity every day. In the course of taking medicine, the importance of taking medicine and the errors of Tibetan medicine behavior were told to the patients again. At the same time, the medication reminder was set for the patients and the cultivation of their medication awareness was promoted.

## 1.3 Observation index

The changes of depression severity, quality of life, self-efficacy and satisfaction were compared between the two groups before and 6 months after intervention. Among them, the assessment of depression severity is mainly achieved by the Hamilton Depression Scale (HAMD), whose main items include seven syndrome states, and the higher the score obtained indicates the more obvious the depressive symptoms of patients [7]. The World Health Organization Quality of Life Scale-Brief Form Questionnaire was used, completed the evaluation of the quality of life of the subjects [8]: the main content of this scale covers: (1) physiological function; (2) psychological function; (3) social relationship; and (4) surrounding environment, and the higher the score, the better the quality of life of the subjects. The comprehensive evaluation of the overall satisfaction of the subjects is achieved by the self-developed satisfaction questionnaire within the hospital [9]: This scale mainly covers three options (very satisfied and satisfied, and not satisfied), taking the ratio of the sum of very satisfied and satisfied persons to the total number, and multiplying by 100% as the overall satisfaction. General Self-Efficiency Scale (GSES) was used to evaluate the level of self-efficacy of subjects [10]: this scale contains 10 items, each item is scored 1-4 points according to "completely incorrect-completely correct", the total score is 10-40 points, the higher the score indicates the better the self-efficacy of patients.

## 1.4 Statistical processing

Data analysis was completed with SPSS 22.0 software, and counting and measurement data were expressed with% and  $(\bar{x} \pm s)$ , and  $\chi^2$  and t tests were performed. P<0.05 means the difference is statistically significant.

#### 2. Results

 $\pm s$ )

# 2.1 Evaluation of basic data in two groups

There were no significant differences between the study group and the control group in terms of gender, age and course of disease (all P > 0.05), as shown in Table 1.

Group	Cases	gender (male/female)	age (year)	Course of disease (year)
Research group	42	24/18	38.44±2.39	2.05±0.12
Control group	43	26/17	$38.62 \pm 2.47$	$2.07\pm0.13$
$\chi^2/t$ value	-	0.097	0.341	0.737
P value	-	0.756	0.734	0.464

**Table 1.** Evaluation of basic data in two groups

## 2.2 Evaluation of HAMD score before and after intervention in both groups

After intervention, HAMD scores in both groups were significantly lower than those before intervention, and those in the study group were lower than those in the control group (all P < 0.05), as shown in Table 2.

**Table 2.** HAMD score evaluation before and after intervention in both groups (scores,  $\bar{x}$ 

Group	cases	Pre-intervention	Post-intervention	T value	P value
Research	42	28.38+4.72	9.10±3.94#*	20.322	0.000
group	42	20.30-4.72	9.10±3.94π	20.322	0.000
Control	43	28.45+4.81	12.57±4.10#	16.476	0.000
group	13	20.13 = 1.01	12.37 = 1.10   10.17	10.170	0.000
T value	-	0.068	3.977	-	-
P value	-	0.946	0.000	-	-

Note: Compared with before intervention, #P<0.05; compared with control group, \*P<0.05

## 2.3 Quality of life evaluation before and after intervention in two groups

After intervention, the quality of life scores of both groups were significantly higher than before intervention, and the research group was higher than the control group (all P < 0.05), see Table 3.

**Table 3.** Quality of life evaluation before and after intervention in both groups (points,  $\bar{x} \pm s$ )

Group	time	Research group (n=42)	Control group (n=43)	T value	P value
physiological	Pre-intervention	$8.35 \pm 0.87$	$8.35 \pm 0.88$	0.000	1.000
function	Post-intervention	13.02±1.34*	$10.25 \pm 1.01$	10.779	0.000
Psychological function	Pre-intervention	$7.48 \pm 0.73$	$7.50\pm0.75$	0.125	0.901
	Post-intervention	11.24±0.81*	$9.40\pm0.74$	10.939	0.000
Social	Pre-intervention	$8.21 \pm 0.60$	$8.23 \pm 0.61$	0.152	0.879
relations	Post-intervention	10.94±1.03*	$9.12\pm1.32$	7.076	0.000
surrounding	Pre-intervention	$7.60\pm0.61$	$7.61 \pm 0.62$	0.075	0.940
environment	Post-intervention	10.90±1.19*	$9.34 \pm 0.66$	7.497	0.000

Note: Compared with the control group, \*P<0.05

# 2.4 Overall satisfaction evaluation of the two groups

The overall satisfaction of the study group was higher than that of the control group (P < 0.05), see Table 4.

**Table 4.** Overall Satisfaction Evaluation of Two Groups (n, %)

Group	Cases	Very satisfied	Satisfied	Dissatisfied	Overall satisfaction
Research group	42	24	18	2	40 (95.24) *
Control group	43	20	14	9	34 (79.07)
$\chi^2$ value	-	-	-	-	4.930
P value	-	-	-	-	0.026

Note: Compared with the control group, \*P<0.05

# 2.5 Evaluation of GSES score before and after intervention in two groups

After intervention, the GSES scores of both groups were significantly higher than before intervention, and the study group was higher than the control group (all P < 0.05), see Table 5.

**Table 5.** GSES score evaluation before and after intervention in both groups (scores,  $\bar{x} \pm s$ )

Group	cases	Pre-intervention	Post-intervention	T value	P value
Research group	42	13.09±5.22	22.49±5.73#*	7.859	0.000
Control group	43	$13.14\pm5.18$	18.78±4.58#	5.349	0.000
T value	-	0.044	3.298	-	-
P value	-	0.965	0.001	-	-

Note: Compared with before intervention, #P<0.05; compared with control group, \*P<0.05

## 3. Discussion

With the deepening of clinical research in recent years, more and more scholars have found that the occurrence of depression is closely related to multiple internal or external factors, mainly including biological and social factors, as well as psychological factors, and the recurrence rate of patients after treatment is relatively high, which has a greater harm to their prognosis and survival

status. Now it has been widely concerned by many countries at home and abroad, and has been studied in the form of subject [11-13]. At present, there are many drugs used clinically to treat depression, including dopamine and norepinephrine, as well as mirtazapine and fluoxetine, although these drugs can control the relevant clinical symptoms of patients to some extent. However, the long-term therapeutic effect is still not very ideal, and with the prolongation of the time of drug use, patients are more likely to trigger a series of drug-related adverse reactions, and then affect their prognostic status to a greater extent. Relevant studies reported that [14-15]: the implementation of scientific psychological intervention for patients can promote the recovery of their psychological symptoms to a certain extent, and also has a positive role in the prevention of suicidal tendencies of patients. Relevant studies have reported that [16-17]: positive and effective health education or psychological guidance for depressive patients can significantly improve the mastery of comprehensive knowledge of the disease, and targeted psychological intervention according to individual differences of patients. In addition, giving full play to the social support of patients' family members and friends can effectively reduce their depressive mood and poor psychological state, and also have a more significant effect on the improvement of their quality of life, so it is also easier to optimize the prognosis of patients.

The results of the study and comparison found that the HAMD scores of the two groups of patients after the intervention were significantly lower than before the intervention, and the study group was lower than the control group, which fully indicated that the clinical intervention effect of applying KAP nursing to the group of patients with severe depression was ideal. This is corroborated in Li Feng's Research Report [18]: it pointed out that after the knowledge, faith and practice nursing intervention, the HAMD score of depression patients was (9.14±3.73) points, which was lower than that of the conventional nursing intervention group (12.48±4.33). Analysis of the reasons, the author believes that the implementation of KAP nursing can effectively measure the health education effect of patients, help patients to obtain depression-related knowledge from subjective aspects, and after receiving knowledge into beliefs, and then through reasonable health behavior to show, further promote patients to obtain a more ideal treatment effect. At the same time, KAP nursing can strengthen communication between nurses and patients and their families to a certain extent, and has a more significant effect on solving patients' psychological problems reasonably and effectively. In addition, the results of this paper also showed that the quality of life scores of the two groups of patients after intervention were significantly higher than before intervention, and the study group was relatively higher than the control group, which fully demonstrated that KAP care can significantly improve the quality of life of patients with severe depression. The reason for this may be that KAP nursing intervention can fully mobilize the family support of patients, and through intensive communication with patients' families, it helps patients to obtain necessary support from their families in material and psychological aspects, further improves patients' firm confidence in rehabilitation, and plays a more active role in promoting patients' quality of life [19-20]. In addition, this paper also found that the overall satisfaction of the study group was higher than that of the control group, which indicated that the implementation of KAP nursing intervention was beneficial to improve the satisfaction of patients with severe depression. The reason may be that KAP nursing intervention can effectively improve the clinical symptoms of patients, and then help them build confidence to overcome the disease, thus promoting the establishment of a good doctor-patient relationship. In addition, the GSES scores of the two groups of patients after intervention were significantly higher than before intervention, and the research group was higher than the control group, which suggested that KAP nursing intervention had a significant effect in improving the self-efficacy of patients with severe depression. The main reasons may lie in: KAP nursing intervention can explain disease-related knowledge to patients and their families, as well as the importance of self-management and medication compliance by issuing publicity brochures and expert lectures. Thus, to a certain extent, it improves the patients' knowledge of the disease and self-management ability, effectively corrects the wrong treatment attitude and belief of the patients, further achieves the purpose of improving the patients' self-efficacy, and finally makes them more cooperative or support the corresponding drug treatment program. This is supported by corresponding data in the reported results of Wang Shuang et al. [21-22].It should be pointed out that there are also corresponding limitations and shortcomings in the process of this study, such as the sample size involved in the study is still relatively small, the follow-up time is relatively short, and the study is relatively small in scope, but the reasons for this kind of situation are mainly related to the impact of the outbreak of new coronary pneumonia and other factors. In order to obtain more scientific and representative research conclusions, we can try to further expand the sample size of the study and extend the follow-up time in the future, and actively invite relevant medical institutions at the same level or at a higher level to carry out more close collaborative research, so as to obtain more rigorous results and data, which also provides more intuitive ideas for future research directions.

In conclusion, KAP nursing can effectively alleviate the depressive symptoms of severe patients, at the same time help to improve the quality of life and self-efficacy of patients, improve satisfaction, and is worthy of clinical application.

## **Project**

Project No: 2019- -KYYWF-1213

Project source: basic scientific research industry of Heilongjiang Provincial undergraduate universities in 2019

#### Reference

- [1] Tolahunase MR, Sagar R, Faiq M,et al. Yoga- and meditation-based lifestyle intervention increases neuroplasticity and reduces severity of major depressive disorder: A randomized controlled trial[J].Restor Neurol Neurosci,2018,36(3): 423-442.
- [2] Xiao L, Zhu X, Gillespie A,et al. Effectiveness of mirtazapine as add-on to paroxetine v. paroxetine or mirtazapinemonotherapy in patients with major depressive disorder with early non-response to paroxetine: a two-phase, multicentre, randomized, double-blind clinical trial[J].Psychol Med, 2020, 14(52):1-9.
- [3] Li Yuqin, Luan Xiaorong, Li Xiuying, et al. Construction of the evaluation system of humanistic care knowledge and conduct for clinical nurses [J]. Chinese Journal of Labor Health and Occupational Diseases, 2020, 38 (6): 470-472.
- [4] Wei Xiaojing, Yan Fan, Jing Mengjuan, et al. Survey on current knowledge and practice of ICU nurses in preventing stress injury related to medical devices [J]. Chinese Journal of Nursing, 2020, 55 (1): 45-50.
- [5] Yang Qian, Liu Liping, Wang Yao, et al. The influence of continuing care based on mobile health platform on knowledge, belief and behavior of patients discharged from hospital with venous thromboembolism [J]. Chinese Journal of Modern Nursing, 2020, 26 (9): 1231-1235.
- [6] Guo Tiansheng, Luo Xiaolin, Li Xinchun, et al. Evaluation of clinical reliability and validity of expert diagnostic system for psychological diseases [J]. Chinese Journal of Clinical Psychology, 2014, 22 (1): 96-100.
- [7] Guan Xiaoxuan, Zhou Bing, Wang Qiong, et al. Clinical study of Frenkel therapy combined with Plum-blossom Needle Tapping in the treatment of ataxia after cerebellar stroke [J]. Chinese Journal of Physical Medicine and Rehabilitation, 2020, 42 (4): 359-362.
- [8] Su Shangxian, Ye Ying, Chen Junqi, et al. Clinical study of three-needle knee rehabilitation after anterior cruciate ligament reconstruction [J]. Journal of Traditional Chinese Medicine, 2020, 48 (6): 63-66.
- [9] Qiao Guofang. Improving effect of empathic nursing on depressive mood and life function of depressed patients [J]. Electronic Journal of Integrated Traditional Chinese and Western Medicine

- Cardiovascular Disease, 2020, 8(5): 140-141.
- [10] Li Liqin, Liu Ruifeng, Huang Weiyan, et al. Application of Acceptance and Commitment Therapy in Young and Middle-aged Maintenance Hemodialysis Patients [J]. Chinese Journal of Modern Nursing, 2020, 26 (7): 953-956.
- [11] Kakeda S, Watanabe K, Katsuki A,et al.Relationship between interleukin (IL)-6 and brain morphology in drug-naïve, first-episode major depressive disorder using surface-based morphometry[J].Sci Rep,2018,08(01):10054-10054.
- [12] Tajika A, Furukawa TA, Inagaki M,et al.Trajectory of criterion symptoms of major depression under newly started antidepressant treatment: sleep disturbances and anergia linger on while suicidal ideas and psychomotor symptoms disappear early[J].Acta Psychiatr Scand, 2019, 140(6):532-540.
- [13] Duffy L, Bacon F, Clarke CS, et al. A randomised controlled trial assessing the use of citalopram, sertraline, fluoxetine and mirtazapine in preventing relapse in primary care patients who are taking long-term maintenance antidepressants (ANTLER: ANTidepressants to prevent reLapse in dEpRession): study protocol for a randomised controlled trial[J].Trials,2019,20(1):319-320.
- [14] Li Hui, Wei Zhonghua, Zhu Yongxin, et al. Application of knowledge-belief-behavior model in health education of depression patients [J]. Hebei Medicine, 2013, 28 (23): 3658-3659.
- [15] Xu Jing, Xu Sheng, Shao Xueqing, et al. Effect of Intensive Nursing with Knowledge, Belief and Behavior Theory on Postoperative Anxiety, Depression and Quality of Life of Patients with Liver Cancer [J]. Journal of Clinical Nursing, 2016, 15 (5): 22-25.
- [16] Li Dong, Tang Yanhua, Jiang Yaling, et al. Effects of knowledge, belief and behavior model intervention on anxiety and depression in young hypertensive patients [J]. China Health Nutrition, 2016, 26 (8): 379-380.
- [17 Su Hui, Zhang Huadong. Controlled study on the effect of knowledge, belief and behavior model intervention on first-episode depression patients [J]. Nursing practice and research, 2018, 15 (9): 7-9.
- [18] Li Feng. Analysis of nursing effect of psychological nursing under the mode of knowledge, belief and conduct on depression [J]. Chinese and foreign medical treatment, 2018, 37 (22): 156-158.
- [19] Xu Yingzhen, Pan Ruili, Zhao Di, et al. Effect of 3H nursing based on knowledge, belief and behavior mode on negative mood and quality of life of patients with chronic obstructive pulmonary disease combined with depression [J]. International Journal of Psychiatry, 2019, 46 (2): 371-373.
- [20] Yu Kangying, Chen Zhe. Research on the application of knowledge, belief and behavior mode of health education to the prevention and treatment of depression among college students [J]. Intellectual Health, 2018, 4 (27): 27-28.
- [21] Wang Shuang, Wei Ligang, Xun Junqi, et al. The effect of systematic supportive psychological intervention on psychological status and quality of life of convalescent schizophrenia patients with depressive symptoms [J]. Journal of Community Medicine, 2020, 18 (2): 140-143.
- [22] Zhang Jing, Lei Chengfeng. Clinical effect analysis of psychological nursing intervention on improving depressive symptoms of schizophrenia patients [J]. Electronic Journal of Cardiovascular Disease of Integrated Traditional Chinese and Western Medicine, 2020, 8 (16): 116-117.