

Article

Observed effects of behavioral experiential mental health education in the perioperative period of intracranial tumor resection

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Abstract: Objective: To find out the application effect of action-experiential psycho wellness education in the perioperative period of intracranial tumor resection and to assess its impact on patients' psychological state, mental toughness, quality of life, complication rate, and nursing satisfaction. **Methods:** By using a risk-controlled trial design, 117 cases of intracranial tumor resection underwent from January 2021 to November 2024, admitted to the neurosurgery department of a hospital were selected and randomly divided into two groups: the reference ($n = 59$) and the observatory ($n = 58$) groups. The routine nursing intervention was accepted in the comparison arm, and action-experiential mental health education was added on this basis in the comparison arm. Observe and compare the patients' psychological state, mental toughness, and their changes in living quality, as well as compare the complication rate and nursing satisfaction of the two groups. **Results:** Following the innovation, the SAS and SDS ratings of the observation team were less important than those of the control team ($p < 0.05$), the CD-RISC mark was significantly enhanced ($p < 0.05$), and the SF-36 was significantly improved ($p < 0.05$). The incidence of postoperative complications in the observation group (6.77%) was significantly lower than that in the control group (22.41%) ($p < 0.05$), and nursing satisfaction (91.38%) was significantly higher than that in the control group (74.58%) ($p < 0.05$). **Conclusion:** Behavioral experiential mental health education effectively enhances psychological well-being and resilience, improves quality of life, reduces postoperative complications, and boosts nursing satisfaction among intracranial tumor patients during the perioperative period, highlighting its significant clinical utility.

Keywords: intracranial tumor; perioperative period; action-experiential mental health education; psychological state; quality of life

1. Introduction

Intracranial tumors refer to tumorous organisms that grow abnormally in the cranial cavity, generally the brain, meninges, cranial nerves, blood vessels, and their accessory areas [1]. Upon the beginning of the course of the disease, patients may experience localized headaches and increased intracranial pressure, and as the disease worsens, hemiparesis and aphasia may also occur, greatly reducing the quality of life of the patient. Epidemiological data reveal that glioblastoma accounts for 45% of all intracranial tumors, with approximately 100,000 new cases of intracranial tumors each year, accounting for 1.5% of all tumor cases [2,3]. In China, the mainstay of treatment for intracranial tumors is minimally invasive surgery, which is usually done with the help of endoscopic equipment [4]. Intracranial tumor resection is a high-risk and highly demanding procedure in terms of the clinical and physiological status of the patient. Perioperative psychiatric mental education and

care are of great significance in improving patients' postoperative recovery, reducing the incidence of complications, and enhancing patient satisfaction. Recently, a growing number of research studies suggest it is possible for psychological nursing interventions to significantly improve the perioperative mental health status of patients with intracranial tumors, reduce anxiety and melancholic moods, and raise life quality and nursing satisfaction of patients [5,6]. Action-experiential mental health education, as an emerging psychological intervention, helps patients better understand and cope with their emotions and stress by engaging them in practical psychological experience activities. This kind of education does not only emphasize the teaching of theoretical aspects; rather, it stresses the enhancement of patients' self-regulation ability and psychological resilience through hands-on experience. Studies have shown that the application of action-experiential mental health education in gynecological surgery patients has demonstrated significant stress reduction effects, effectively reducing patients' anxiety and depression levels and enhancing survival quality [7]. Nevertheless, the application effect of mental health education for intracranial tumor patients in the perioperative period, especially action-experiential education, lacks systematic research and in-depth discussion. The psychological needs of intracranial tumor patients are more complex and diverse due to the complexity of surgery and the long-term health problems that may occur after surgery. Therefore, exploring the application effect of action-experiential mental health education in the perioperative period of intracranial tumor patients is clinically meaningful for optimizing the patients' postoperative rehabilitation path and enhancing the overall treatment effect. The purposes of this field plan are to compare and analyze in terms of the applicative effect of action-experiential mental health education and traditional nursing interventions in the perioperative period of patients with intracranial tumors and to explore their impact on patients' mental health, quality of life, and nursing satisfaction.

2. Data with methodology

2.1. Study population

The study population consisted of 117 patients admitted to our neurosurgery department for resection of intracranial tumors during the period from January 2021 to November 2024. There were 65 male patients and 52 female patients; they were in the age range from 25 to 75 years old, with a medium age of 52.36 ± 12.43 years old. With the design of a randomized controlled trial, the study randomly divided the patients into two sets: the comparison sets ($n = 59$ patients) and the watchdog sets ($n = 58$ patients).

2.2. Criteria for selection and elimination

Criteria for inclusion:

(1) Meet the requirements of the 2016 edition of the EANO Code of Guidelines for meningioma in diagnosing and standardizing the treatment of neoplastic tumors;

(2) Have been diagnosed with the presence of an intracranial tumor by various means of examination such as clinical X-ray plain film, cerebral angiography, ventriculography, and pneumoencephalography;

(3) The patient must meet the surgical indications for intracranial tumor resection, i.e., whether the tissue is suitable for surgery in terms of location, size, and physical condition for the candidate;

(4) The patient should have a clear state of consciousness and smooth communication ability;

(5) Patients and their families will need to freely be part of their choice to participate in it and sign an informed consent form.

Criteria for exclusion:

(1) The patient shows double pupil dilatation, spontaneous respiratory arrest, and is in a life-threatening state;

(2) Bleeding in critical areas such as the thalamus or brainstem, or if the victim's gross national disease is not good enough;

(3) Presence of anatomical disabling criteria that make surgery inappropriate;

(4) Accompanied by mental system diseases or inability to communicate normally;

(5) Patients withdrawing from the study midway for various reasons, such as deterioration of condition, transfer to another hospital, etc.

2.3. Intervention methods

2.3.1. Control group

The exercise of routine nursing interventions in the case of the reference arm includes the following: a) Preoperative preparation: including preoperative examination, skin preparation, fasting, and abstinence from food and drink, etc., to ensure that the operation is carried out smoothly; b) Postoperative monitoring: Closely observe life traits of the insured, such as heart rate, blood pressure, respiration, etc., and find and deal with abnormalities in time; c) Health education: Explain to patients and their families about intracranial tumors, surgical procedures, and postoperative precautions to improve their knowledge and understanding about the illness.

2.3.2. Obstruction team

On the basis of routine care, the obeying glass team adopts action-experiential mental health education; the specific measures are as follows:

(1) Preoperative psychological intervention: a) Psychological assessment: through face-to-face interviews, understand the patients' psychological status and needs, and formulate a personalized psychological intervention plan; b) Collective psychological counselling: Organize collective psychological counselling for the patients, share the successful cases of surgery, and enhance the patients' confidence. At the same time, invite patients who have recovered well to share their experiences, and reduce patients' anxiety and fear by telling them from their own experience.

(2) Experiential activities: a) Emotional regulation training: Help patients learn to regulate and control their emotions through breathing exercises, muscle relaxation, etc.; b) Positive thinking meditation: Guide patients to meditate positively, focusing

on the present moment and reducing worries and fears about the future; c) Group painting: Organize patients to engage in group painting activities to express their inner feelings and thoughts through art creation and release negative emotions; d) Role-playing: Simulate the postoperative period and share the experiences of patients who have recovered well; e) Role-playing: Simulate situations that may be encountered after surgery, such as pain management, rehabilitation exercises, etc., so that patients can adapt and learn coping strategies in advance.

(3) Personalized psychological counselling: Personalized psychological counselling is provided according to the individual differences and needs of patients. By establishing a good communication relationship with patients, we listen to their inner confusion and worries and give them positive support and advice. For those with negative emotions like anger and depressive disorders, cognitive behavioral therapy and other methods are used to help patients change their negative thinking patterns and behavioral habits.

(4) Family support: Encourage the patient's family to participate in the process of psychological care and provide emotional support. Through family meetings and psychoeducation, family members' understanding of and concern for the patient's psychological condition are enhanced. Instruct family members how to give positive psychological support to patients in daily life, and jointly promote patients' psychological recovery.

2.4. Observation indicators

(1) Assessment of psychological status: We took the Self-Assessment Scale for Anxiety (SAS) and Self-Depression Scale (SDS) to take into account the psychological status of the patients, which was designed by Prof. Zung by 1971 and contains 20 assessment items, which comprehensively cover a variety of anxiety symptoms such as nervousness, anxiety, and so on, and the scoring interval is between 0 and 80, and the increasing score means the degree of anxiety is increasing [8]. Increasing score means increasing anxiety as well as increasing anxiety degree [8]. On the other hand, the SDS scale was created by William W. K. Zung in 1965 to measure an individual's depressive mood [9]. The scale also has 20 assessment items, and the scale ranges from 0 to 80, where a rise in points indicates a rise in depression.

(2) Assessment of psychological resilience: We utilized the psychological resilience scale (CD-RISC) for the mental resilience level of our patients, which was measured at the beginning (i.e., at the beginning of the admission period) and the end (i.e., at the time of discharge) of nursing interventions to measure the psychological stress state of the two groups of patients, respectively. The scale was compiled by Conner et al. [10], which contains five dimensions of competence, withstanding negative emotions, adapting to change, control and emotional arousal, with a total of 25 assessment points, each of which is scored according to the 5-point scale ranging as 0 to 4 points. The Chinese version of the CD-RISC scale was further streamlined into three core dimensions: resilience (0–52 points), strength (0–32 points), and optimism (0–16 points), with higher scores implying greater psychological resilience.

(3) Quality of life: patients' quality of life was assessed using the Short Form of Health Survey (SF-36) [11]. Measurements were taken before and after the intervention to compare the changes in scores between the patient groups. The SF-36 consists of 36 questions covering eight dimensions: body ache, gross health, mental character, social role, academic role, affectionate role, physical role, vitality, and general health perceptions. For the scale, views could range on a point score in the 0–100 scale, where a stronger mark signified a better overall balance of quality of one's life.

(4) Assessment of complications: To record the incidence of postoperative symptoms, including injury, bleeding, neurological dysfunction, and so on.

(5) Nursing Service Satisfaction Survey: In order to assess the specifics of patients' satisfaction with nursing services in both groups, a specially designed questionnaire was used to conduct the survey. The questionnaire broadly covered multiple aspects of nursing services, such as the service attitude of carers, the demonstration of professional skills, the effectiveness of rehabilitation guidance, the strengths and weaknesses of pain management, and the overall condition of the ward environment. In terms of the scoring mechanism, we set a full score of 100, and based on the actual feedback from the patients, we divided the satisfaction into four levels: highly satisfied (≥ 90 scores), satisfied (≥ 75 to 89 scores), fair (≥ 60 to 74 scores), and dissatisfied (< 60 scores). Overall satisfaction was calculated as (highly satisfied cases + satisfied cases)/overall number of cases $\times 100\%$.

2.5. Analysis of statistics

To analyze the data, SPSS 20.0 was used. The quantitative data were expressed by ($\bar{x} \pm S$), and the t test was used for intergroup comparison. The count data were expressed by percentage, and the chi-square test was used for intergroup comparison, and the difference of $p < 0.05$ was regarded as having scientific importance.

3. Outcomes

3.1. The baseline data of the two groups of patients were compared

After comparing patients' baseline information of both groups, including gender, age, physical health index, education level, and tumor type, there was no significant difference ($p > 0.05$). It is comparable. Specific data can be found in Table 1.

Table 1. Data comparison of the two groups at baseline.

Items	Control group ($n = 59$ cases)	Observation group ($n = 58$ cases)	Statistical value	P value
Gender (cases, %)			$\chi^2 = 0.524$	0.325
Male	32 (54.24%)	33 (56.90%)		
Female	27 (45.79%)	25 (43.10%)		
Mean age (years, $\bar{x} \pm s$)	51.36 ± 12.43	52.06 ± 12.06	$T = 0.624$	0.232
Physical fitness index (kg/m^2 , $\bar{x} \pm s$)	21.34 ± 2.61	21.46 ± 2.34	$T = 0.748$	0.325
Educational level (cases, %)			$\chi^2 = 0.148$	0.306
Middle school and below	6 (10.17%)	8 (13.79%)		

High school	20 (33.90%)	19 (32.26%)	$\chi^2 = 0.241$	0.214
College and above	33(55.93%)	31 (53.45%)		
Tumor type (cases, %)				
Meningioma	18 (30.51%)	20 (34.48%)		
Glioma	13 (22.03%)	14 (24.14%)		
Pituitary tumor	9 (15.25%)	11 (18.97%)		
Others	19 (32.20%)	13 (22.41%)		

3.2. Assessment of the psychological state of patients in the two groups

In the initial stage of intervention, there was no significant difference between the SAS and SDS ratings of the two groups of patients ($t = 2.456$, $p = 0.924$; $t = 1.934$, $p = 0.684$). Upon comparison, a decrease appeared in the scores of SAS and SDS in the patients of both control groups at the end stage, and the observation group was significantly lower with a significant difference than the control group ($p < 0.05$). Specific data can be found in **Table 2**.

Table 2. Psychological status comparison of the patients at the beginning and at the end of the intervention (score, $\bar{x} \pm s$).

Group	Number of cases	SAS score				SDS score			
		Intervention early stage	End stage	<i>t</i> -value	<i>P</i> -value	Intervention early stage	End stage	<i>t</i> -value	<i>P</i> -value
Observation group	58	52.64±6.72	33.87±2.16	14.671	0.001	58.14±5.68	35.16±1.78	10.327	0.001
Control group	59	53.06±5.86	37.05±1.56	12.726	0.001	58.57±5.32	40.28±1.08	9.647	0.001
<i>t</i> -value		2.456	10.324			1.934	10.847		
<i>P</i> -value		0.924	0.001			0.684	0.001		

3.3. Contrasting initial and final mental toughness estimate

At the initial stage of the intervention, comparing the CD-RISC (Connor-Davidson Resilience Scale) total score and its dimension scores of the two groups of patients showed no statistically significant difference ($p > 0.05$). However, by the end of the intervention, the CD-RISC total score and its dimensions had increased in both groups. In particular, the observation group's score improvement was considerably greater than that of the control group, presenting a statistically significant difference ($p < 0.05$). Specific data can be found in **Table 3**.

Table 3. Specific scores of the two groups of patients at the beginning of the intervention compared with those at the end (points, $\bar{x} \pm s$).

Group	Number of cases	Toughness		Strength		Optimism		Total score	
		Intervention early stage	End stage	Intervention early stage	End stage	Intervention early stage	End stage	Intervention early stage	End stage
Observation group	58	28.50 ± 5.10	38.75 ± 4.80	20.10 ± 3.20	25.30 ± 3.50	8.50 ± 1.80	12.00 ± 2.00	57.10 ± 9.90	76.05 ± 10.30
Control group	59	30.20 ± 4.90	19.50 ± 3.30	21.00 ± 3.60	7.80 ± 1.90	9.20 ± 2.10	55.10 ± 10.10	60.40 ± 10.50	30.20 ± 4.90

<i>t</i> -value	0.894	5.432	0.926	3.127	1.784	4.325	1.098	6.547
<i>P</i> -value	0.307	0.001	0.360	0.001	0.067	0.001	0.044	0.001

3.4. Primary and final life quality assessment comparison

At the initial stage of intervention implementation, the SF-36 scores of the two groups of patients were compared and analyzed, and the results showed that there was no statistically significant difference between the two groups ($t = 0.684$, $P = 0.748$). However, by the end of the intervention period, the SF-36 scores of the patients in both groups decreased, and it is worth noting that the decrease in the scores of the observation group was significantly greater than that of the control group, and the difference between the two groups was statistically significant ($t = 11.879$, $p < 0.05$). Specific data can be found in **Table 4**.

Table 4. Contrast between the quality of life scores of the two groups of patients at the beginning and at the end of the intervention (points, $\bar{x} \pm s$).

Group	Number of cases	SF-36 score		<i>t</i> -value	<i>P</i> -value
		Intervention early stage	End stage		
Observation group	58	67.92 $\pm$ 3.01	88.87 $\pm$ 4.16	13.858	0.001
Control group	59	68.54 $\pm$ 3.22	79.05 $\pm$ 4.63	12.364	0.001
<i>t</i> -value		0.684	11.879		
<i>P</i> -value		0.748	0.001		

3.5. Comparative analysis of complication rate

During the nursing process, the observation group encountered 4 cases of complications, broken down into 2 infections, 1 hemorrhage, and 1 neurological dysfunction; in contrast, the control group faced 13 complication events, specifically 6 infections, 3 hemorrhages, and 4 neurological dysfunctions. Statistical data showed that the complication rate in the observation group (6.78%, i.e., 4 out of 59 patients) was significantly lower than that in the control group (22.41%, i.e., 13 out of 58 patients), and this difference was statistically significant at the level of statistics ($\chi^2 = 7.486$, $p < 0.05$). Specific data can be found in **Table 5**.

Table 5. Contrast between the incidence of complications in the two groups of patients (*n*).

Group	Number of cases	Infection	Bleeding	Neurological dysfunction	Total incidence	Total incidence
Observation group	58	2 (3.39%)	1 (1.69%)	1 (1.69%)		4 (6.77%)
Control group	59	6 (10.34%)	3 (5.17)	4 (6.90%)		13 (22.41%)
χ^2 value						7.486
<i>P</i> value						0.001

3.6. Cross-group comparison of patient care satisfaction

The observation group had 56.90% (33/58) ‘very satisfied’, 34.48% (20/58) ‘satisfied’, 8.62% (5/58) ‘normal’, 0 ‘dissatisfied’ (10/59), and 8.47% (5/59) were dissatisfied. There was a significant difference between the total nursing satisfaction

observation group (91.38%, 53/58) and the control group (74.58%, 44/59) ($\chi^2 = 11.247, p < 0.05$). Specific data can be found in **Table 6**.

Table 6. Comparison of patient care satisfaction between the two groups (*n*).

Group	Number of cases	No. of unsatisfied	No. of average	No. of satisfied	No. of very satisfied Total satisfaction	Total satisfaction
Observation group	58	0	5 (8.47%)	20 (33.90%)	34 (50.85%)	54 (91.53%)
Control group	59	5 (8.62%)	10 (17.24%)	19 (32.76%)	24 (41.38%)	43 (74.14%)
χ^2 value						11.247
<i>P</i> value						0.001

4. Discussion

Intracranial tumors are neoplastic lesions that originate in the nervous system inside the cranial cavity, and their treatment strategies are mainly focused on surgical interventions, and in most cases, they are benign tumors. However, malignant tumors such as glioblastoma and medulloblastoma may lead to symptoms such as cerebral edema and vomiting as the disease progresses, which can seriously lower the patient's life quality [12,13]. In China, intracranial tumor treatment is dominated by resection, but patients often face multiple stresses during treatment, and these stresses accumulate to form a stress response, leading to the persistence of adverse emotions [14]. Studies have pointed out that the stress suffered by tumor patients during the perioperative period mainly stems from the pain caused by the disease, discomfort with the hospital environment, fear of surgery, and concern about the prognosis [15]. Although occupational therapy used in conventional nursing can improve perioperative patients' psychological condition to a certain extent, there are still limitations in its scope of action and application effects. Action-experiential mental health education integrates the characteristics of experiential teaching modes [16], implements the principles of subjectivity, encouragement, practicability, and non-directivity in mental health education courses, and aims to motivate students to achieve their learning goals and improve their mental health status through diverse experiential teaching means such as role-playing, situational simulation, and role model demonstration. It has been shown that strengthening mental health education can positively adjust the coping strategies and optimize the psychological state of patients with hepatitis B, thereby improving their medication compliance and quality of life. Focusing on patients with intracranial tumors, this study implemented an action-experiential mental health education intervention, aiming to investigate the specific effects of this model on reducing patients' in-hospital behavioral stage of distress and improving their survival support.

4.1. Positive effects of action-experiential mental health education upon the patients' psychological condition of intracranial tumors

Findings of this study showed that there was no significant difference in anxiety (SAS) or depression (SDS) rating at the beginning of the intervention, indicating that the two groups were comparable in terms of their psychological status. However,

SAS and SDS ratings in the observation group were significantly lower than those in the reference side at the end of the intervention period ($p < 0.05$), indicating that action-experiential mental health education can significantly improve perioperative anxiety and depression in patients with intracranial tumors. The study suggests that targeted psychological intervention for gynecologic oncology patients can effectively reduce the negative patient heart rate and improve their anger and moods of relaxation and stress [17]. And a large number of reports claim that the implementation of action-experiential mental health education in clinical teaching, in which the instructional course focuses on mental and physical integration, pedagogical methods pay attention to the action experience, and the teaching situation increases multidimensional interactions, can promote students' mood experience and exploration, and is conducive to the improvement of mood management ability [18]. Patients with intracranial tumors often face greater psychological pressure due to the complexity of surgery and the long-term health problems that may occur after surgery. Action-experiential mental health education helps patients better understand and cope with their own emotions and stress through a variety of methods, including psychological assessment, group psychological counseling, emotion regulation training, positive thinking meditation, group drawing, and role-playing. Sharing successful cases of surgery and inviting patients who have recovered well to share their experiences in group counseling can enhance patients' confidence and reduce their anxiety and fear; emotion regulation training and positive thinking meditation can help patients learn to regulate and control their own emotions and reduce their worries and fears about the future. The combined application of these interventions led to a significant change in the psychological state for the observation group.

4.2. Enhancement of patients' psychological resilience by action-experiential mental health education

Mental toughness refers to the ability of an individual to adapt well in the face of adversity. There was no marked contrast between the total CD-RISC point and the various dimension scores of both teams at the beginning of the intervention in this study, while at the end of the intervention, the total CD-RISC point and the scores of the three dimensions of resilience, strength, and optimism of the observation set were statistically higher than those of the reference set ($p < 0.05$). This indicates that action-experiential mental health education can effectively enhance the mental toughness of intracranial tumor patients. Previous studies have shown that music intervention can significantly alleviate hospitalized patients' unfamiliarity with the hospital environment and reduce patients' nervousness, and it can significantly reduce the psychological stress level of surgical patients through targeted psychological intervention [19], which is consistent with the results of this study. Improved psychological toughness can help patients cope better with a range of difficulties during surgery and post-operative rehabilitation. Through behavioral-experiential activities, patients not only learned skills to cope with stress during participation but also increased their self-regulation and psychological toughness. For example, role-playing simulates situations that may be encountered post-

operatively, allowing patients to adapt and learn coping strategies in advance, which helps them to cope more comfortably when faced with similar situations in the real world and increases psychological resilience.

4.3. The effect of action-experiential mental health education on the improvement of patients' quality of life

A well-known fact is that the quality of one's life is a key indicator of the good health of the patients. In our investigation, the SF-36 measure has been adopted to assess the life for patients' quality of labor, and the results show that there is no major variation in the SF-36 scores between our pairs of patients at the beginning of the intervention period, while at the end of the intervention period, the SF-36 scores of the observation set are seriously above those of the control set ($p < 0.05$). This indicates that action-experiential mental health education can significantly improve the quality of life of patients with intracranial tumors. Related studies have shown that after the psychological intervention, the life quality marks of patients generally increased, including the improvement of somatic function, psychological function, social function, and other aspects of the score [20], which is consistent with the results of this study. Patients undergoing intracranial tumor resection face both physical and psychological stress during the perioperative period, which may affect their quality of life. Through a variety of methods, behavioral experiential mental health education can help to reduce psychological pressures and improve psychological resilience in patients, which in turn can positively impact their QOL. Group painting activities not only allow patients to develop art creations to allow them to show their deepest emotional feelings to release their insecure ones but also enhance the communication and support among patients and improve their social functioning. In addition, the enhancement of mental toughness also helps patients to better cope with various problems in the process of postoperative rehabilitation, thus improving their quality of life.

4.4. Effect of behavioral experiential mental health education on complication rates

In the present study, the complication rate of the observed team (6.77%) was markedly worse compared to that of the control team (22.41%) ($p < 0.05$). This indicates that action-experiential mental health education can reduce rates of incidence of concurrent disorders after surgery in patients with intracranial tumors. Psychological state is closely related to physiological health, and a good psychological state helps to promote the physiological health of patients. Action-experiential mental health education has likely affected our patients' biological well-being positively by improving their psychological state and mental toughness, thereby reducing the incidence of postoperative complications. For example, patients with higher mental toughness are better able to self-regulate and actively cooperate with rehabilitation therapy when facing discomfort such as postoperative pain, which helps to reduce the incidence of postoperative complications.

4.5. Role of behavioral experiential mental health education in improving nursing satisfaction

Nursing satisfaction is one of the important indicators of nursing service quality. Findings from the current work show that the total satisfactory degree of nursing care in the observation team (91.38%) showed a notably highest level than that of the control team (74.58%) ($p < 0.05$). This indicates that action-experiential mental health education can improve the satisfaction of intracranial tumor patients with nursing services. Behavioral experiential mental health education not only focuses on the patient's mental health, but also increases the family's understanding of and interest in the patient's psychological state through, for example, family support, and jointly facilitates the patient's psychological recovery. This comprehensive approach to psychological intervention allows patients to feel more cared for and supported, and increases their satisfaction with nursing services. In addition, improvements in patients' psychological state and quality of life may also influence their evaluation of nursing services and improve nursing satisfaction.

In summary, the application of action-experiential mental health education in the perioperative period of patients with intracranial tumors has a significant effect, which can improve the psychological state and mental toughness of the patients, improve the living standard, reduce the incidence of complications, and enhance the level of nursing comfort. It is possible to further optimize and improve this psychological intervention in the future to provide more effective psychological support for patients with intracranial tumors and promote their comprehensive recovery.

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