# Advances in Research of Application of Gratitude Intervention in Patients with Malignant Tumor

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**Abstract** In recent years, gratitude intervention, as an application method of positive psychology, has gradually attracted the attention of researchers. Gratitude intervention is considered to be an effective psychological intervention, especially in patients with malignant tumors. This study reviews the research progress of gratitude intervention in patients with malignant tumors, focusing on the mechanism, implementation methods, effect evaluation and challenges in clinical application of gratitude intervention, in the hope of providing a theoretical support and practical guideline for future research and practice.

Key words Gratitude intervention, Malignant tumor, Application, Advances in research

### 1 Introduction

Malignant tumors are one of the leading causes of death worldwide, and patients with such disease often face physical discomfort and tremendous psychological pressure during treatment [1]. However, patients often have different degrees of psychological problems in the course of treatment, including anxiety, depression, fear and social isolation<sup>[2]</sup>. These psychological problems not only affect the quality of life of patients, but also may have a negative impact on the treatment effect. Psychological intervention has become an important part of comprehensive treatment for patients with malignant tumors. In recent years, gratitude intervention, as a non-drug psychological intervention, has gradually gained clinical attention. Gratitude intervention helps patients improve their mental health and quality of life by guiding individuals to experience and express gratitude<sup>[3]</sup>. Gratitude intervention can not only help patients reduce negative emotions, but also enhance their positive evaluation of life and coping ability<sup>[4]</sup>. Therefore, it is of great clinical significance to study the application of gratitude intervention in patients with malignant tumors.

## 2 Theoretical basis of gratitude intervention

Gratitude is a positive emotional response, which refers to an individual's positive emotional experience of the help and support provided by others or the environment<sup>[5]</sup>. Gratitude helps individuals to build positive relationships with others, enhance social support, and enhance well-being and resilience. Psychological studies have found that gratitude can significantly reduce negative emotions, such as anxiety and depression, and promote individual emotional regulation and coping ability. Gratitude intervention is

to improve mental health by consciously guiding individuals to pay attention to positive events in life and enhancing their gratitude feelings<sup>[6]</sup>. The main theoretical basis of gratitude intervention comes from the relevant research of positive psychology. Positive psychology emphasizes the cultivation of positive emotions, resilience and social support to enhance the overall well-being and life satisfaction of individuals. Gratitude, as a core positive emotion, can help individuals free themselves from negative emotions and focus on the positive aspects of life, thus improving their mental health<sup>[7]</sup>.

# 3 Application of gratitude intervention in patients with malignant tumor

The application of gratitude intervention in patients with malignant tumors has multi-dimensional benefits, which are reflected in different methods and strategies. These interventions not only help to improve the mental health of patients, but also have a positive impact on their physiological state. They are manifested in the following aspects:

- **3.1** Written gratitude diary As a simple and effective gratitude intervention, written gratitude diary has been widely used in the psychotherapy of patients with malignant tumors. By recording the details of events, others or life that patients are grateful for every day, they can help them focus on positive emotions and experiences, and reduce the interference of negative emotions such as anxiety and depression. Studies have found that such writing habit can not only help patients get rid of excessive negative thinking, but also stimulate their inner strength and enhance their mental resilience, thereby improving their overall mental health and enhancing their confidence and motivation to fight against diseases [8].
- **3.2 Gratitude meditation** Gratitude meditation is an intervention that combines meditation techniques and a gratitude mindset to help people with malignancies reduce stress and improve their emotional state by focusing on the positive things in their lives or the objects of gratitude. In the process of meditation, pa-

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tients will immerse themselves in gratitude and experience inner peace and satisfaction by means of deep breathing and relaxation. Studies have shown that regular gratitude meditation can effectively reduce anxiety levels and depressive symptoms, promote emotional regulation and improve the ability to cope with stress. In addition, this method can also stimulate patients' love for life and enhance their patience and enthusiasm in the face of treatment<sup>[9]</sup>.

3.3 Group gratitude intervention The group gratitude intervention encourages patient interaction and emotional support in small groups and is designed to promote collective sharing and emotional empathy. In group discussions, patients can freely express their gratitude for life, share positive experiences during treatment, and gain strength and comfort from the stories of other patients<sup>[10]</sup>. Such social interaction not only enhances the social support system of patients, but also helps them get rid of loneliness and feel the sense of care and belonging in the group, thus improving the overall level of mental health. The effect of group gratitude intervention is prominent in promoting patients' emotional connection, improving their sense of social participation and enhancing their ability to resist pressure.

# 3.4 Gratitude intervention combined with psychotherapy

Combining gratitude interventions with traditional psychotherapy approaches such as cognitive behavioral therapy (CBT) and supportive psychotherapy has become an important part of psychotherapy for patients with malignancy. This combined approach not only helps patients develop and strengthen feelings of gratitude, but also improves their way of thinking and identifies and corrects negative cognitive biases through cognitive behavioral therapy. Studies have shown that the combination of gratitude intervention and psychotherapy can significantly improve the emotional stability of patients, enhance their self-regulation ability, and enhance their confidence and courage to cope with the disease<sup>[11]</sup>. Through this comprehensive intervention strategy, the overall treatment effect of patients has been further optimized.

# 4 Effect evaluation of gratitude intervention

The effect of gratitude intervention on malignant tumor patients is not only reflected in the improvement of mental health, but also in the quality of life and social support.

**4.1 Improving mental health** Gratitude interventions have been extensively studied and demonstrated to have a positive effect on the mental health of patients with malignancies. Gratitude exercises have been found to help alleviate negative emotions such as anxiety, depression, and stress by helping patients focus on the positive things in their lives<sup>[12]</sup>. Through recording gratitude items or meditating on gratitude every day, patients can change their negative thinking patterns and improve their sense of self-efficacy and control. This process of emotional transformation enables patients to adopt more positive and rational coping strategies in the face of illness, thereby improving psychological resilience and

emotional stability. In addition, gratitude intervention has also been found to effectively alleviate the pain and anxiety caused by the disease in patients with malignant tumors, improve their overall psychological adaptability, and enhance their psychological ability to resist pressure during treatment<sup>[13]</sup>.

- **4.2** Improving the quality of life Gratitude intervention can significantly improve the quality of life of patients with malignant tumors, especially in enhancing their life motivation and positive emotions. Gratitude exercises help patients rediscover value and meaning in their lives by focusing on the positive events in their lives and the support systems around them [14]. Patients often get satisfaction from trifle things in daily life, such as interaction with relatives and friends, perception of the natural environment, etc., which enables them to maintain a positive attitude in the face of difficult treatment. This positive attitude not only enhances the coping ability of patients, but also effectively alleviates the sense of despair and powerlessness that may occur in the course of the disease. Through the practice of gratitude, patients can improve their psychological well-being and life satisfaction, thereby improving their quality of life and enhancing their confidence in disease treatment[15].
- 4.3 Promoting the social support Social support plays a vital role in the rehabilitation of patients with malignant tumors. The implementation of gratitude intervention promotes the establishment and strengthening of patients' social support system by enhancing the positive interaction between patients and others. It has been found that gratitude groups or group interventions can provide a safe space for patients to share personal gratitude experiences<sup>[16]</sup>. In small groups, patients are able to gain emotional support, understanding, and empathy from other patients by sharing with each other positive experiences, objects of gratitude, or events in their daily lives. Such interaction helps patients establish emotional connection, alleviate the sense of loneliness and social isolation caused by the disease, and enhance their social adaptability. Studies have also found that gratitude intervention can promote communication and trust between patients and their families, friends and medical teams, thus forming a stronger support network, which plays a positive role in the psychological rehabilitation and physiological treatment of patients.
- **4.4 Enhancing the ability to cope with disease** Gratitude intervention can help patients enhance their ability to cope with malignant tumors by enhancing their positive perception and emotional experience of life. Through gratitude practice, patients can better face the challenges brought by the disease and adopt more active coping strategies<sup>[17]</sup>. Driven by gratitude, patients tend to be more patient in the face of pain and discomfort in the course of treatment, showing a stronger ability to adapt. Studies have shown that the cultivation of gratitude can stimulate the inner strength of patients in the face of illness and enhance their ability to cope with stress and difficulties, which is of great significance for improving

their quality of life and prolonging their survival<sup>[18]</sup>.

# 5 Challenges and future directions of gratitude intervention

Although the application of gratitude intervention in patients with malignant tumors has achieved some results, there are still some challenges and research gaps. (i) Individual differences: The psychological needs, life background and cultural differences of patients with malignant tumors may affect the effect of gratitude intervention. Therefore, future research should further explore individualized gratitude intervention programs to meet the needs of different patients. (ii) Long-term effects of the intervention: Most of the current research focuses on the short-term effects of gratitude intervention, lacking in-depth exploration of its long-term effects. Future research should focus on the lasting effects of gratitude interventions on patients' long-term mental health and quality of life. Feasibility of implementation: Some patients may find it difficult to adhere to gratitude intervention due to physical condition or psychological exhaustion. How to improve the participation of patients and the feasibility of intervention remains an important issue for future research.

### 6 Conclusions

As an effective psychological intervention, gratitude intervention has shown positive effects in patients with malignant tumors. By promoting patients to experience and express gratitude, it can effectively improve the mental health of patients, the quality of life, and enhance their sense of social support. However, the implementation of gratitude intervention still faces some challenges, and future research should further explore individualized intervention programs, long-term effect evaluation and its application in combination with other treatment methods. Through constantly improving the theory and practice of gratitude intervention, we can provide more comprehensive psychological support for patients with malignant tumors, help them better cope with the disease and improve their quality of life.

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