

# Research Progress of Geriatric Depression in China

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**Abstract:** Geriatric depression is a common mental health problem in the elderly population, and its influence cannot be ignored. This paper discusses the definition of senile depression, the application of assessment tools, the current prevalence and the causes of geriatric depression. At the same time, by comparing the international and domestic research progress on intervention strategies for geriatric depression, this paper reveals the current research deficiencies in this field in China. In view of these deficiencies, this paper puts forward the prospect of future research, hoping to provide valuable reference and reference for the in-depth promotion of the prevention and treatment of geriatric depression in China, and make greater contributions to improving the quality of life of the elderly.

**Keywords:** Geriatric Depression; A Sense of Control; Social Support; Intervene; Summarize.

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## 1. Introduction

Population aging has become a global challenge, and China is one of the countries with the largest number of elderly people and the fastest aging rate in the world. According to the 2021 data of the National Bureau of Statistics, the proportion of elderly people has increased by 5.44 percent compared with 2010, which clearly reflects the deepening of the aging degree of China's population. China's elderly population has a number of significant characteristics, such as aging, fewer children, empty nest and mental disability, etc. At the same time, their mental health level is also declining year by year [1]. Mental health problems of the elderly have attracted wide attention from all walks of life, especially dementia, depression, anxiety and other mental diseases, the incidence of which is rising, posing a serious threat to the physical and mental health and quality of life of the elderly. Among them, senile depression is particularly common, and has become one of the main problems of the mental health of the elderly. This study is committed to comprehensively combing and summarizing the research status of geriatric depression in China, aiming to develop effective early prevention and intervention measures through in-depth analysis, in order to improve the mental health status of the elderly and enhance their quality of life.

## 2. The Concept of Geriatric Depression

The word Depression originated from the Latin word, meaning "pressure", and was used in the 17th century to describe an emotional state, generally meaning a lack of happiness [2]. Depression, as an emotional experience, refers to a mental state of low mood, lack of excitement, decreased energy, and low sense of self-worth experienced by an individual over a specific period of time. As a natural human response to life's frustrations and difficulties, it can occur at any stage of life. When depression reaches a high degree and lasts for a long time, it may transform into a pathological psychological disorder.

Geriatric depression refers to primary or secondary depression that occurs in people aged 60 years and older[3]. With the gradual decline of physiological functions, the cognitive function and health status of older people decline, causing them to be more prone to depressive mood than other

age groups. According to literature review and summary, depression in the elderly is usually manifested in three aspects of psychology, action ability and social communication: on the psychological level, patients often show negative and pessimistic feelings, feeling useless, disappointed, worthless and helpless, and may have suicidal thoughts. In addition, the symptoms of geriatric depression may also contain certain negative emotional disorders, such as excessive worry about physical health and pessimistic belief that the situation will worsen. Some elderly people troubled by depression show anxiety, fear, which may lead to apathy or despair [4]. In terms of mobility, depression in the elderly is mainly manifested as physical fatigue, decreased willingness to move, reduced mobility, reduced sense of control, and inability to take care of themselves. They usually ignore negative emotions and emergencies in life and regard them as irrelevant [5]. In terms of social interaction, elderly people with depression often have extensive cognitive impairment, tend to escape from interpersonal interactions, reduce the willingness and frequency of social activities, prefer to live alone, and are unwilling to communicate with others, which further aggravates depression. However, it is worth noting that elderly people with depression may not seek medical help directly because of low mood, and they are more likely to cite less specific symptoms such as insomnia, anorexia and fatigue as the main reason for seeking medical attention. Sometimes, the elderly may also see their own depressive symptoms as a normal response to life stress or a natural process of aging [6]. Therefore, without timely detection and intervention, depressive symptoms in the elderly may continue to worsen and eventually develop into pathological depressive disorder [7].

## 3. Measurement of Geriatric Depression

There is a wealth of tools for measuring depression in the elderly. Niu Yanan et al. divided these questionnaires into two categories by clinical indicators: (1) A series of scales suitable for screening the pre-clinical stage, including the Geriatric Depression Scale (GDS), the Central Epidemic Scale (CES-D), and the Beck Depression Questionnaire (BDI); (2) Series of scales suitable for clinical diagnosis and evaluation, including Hamilton Depression Scale (HRSD), self-rated

Depression Scale (SDS) and depressive State Questionnaire (DSI). The other is the three-point method: (1) It has good reliability and validity and has been widely used in China, such as HRSD, SDS and DSI; (2) relatively mature but relatively small application, such as BDI; (3) a scale created specifically for depression in the elderly. Compared with other scales, the geriatric Depression Scale (GDS) has good reliability and validity, so it has been widely used in the research in this field. It was specially developed by Brink et al. for the elderly, and there are several versions. Among them, GDS-15 has been confirmed to have the same reliability and validity as GDS-30, and has also been confirmed in research applications in China[8].

## 4. The Status Quo of Geriatric Depression

An evidence-based study on the prevalence of geriatric depression shows that the global prevalence of geriatric depression is 28.4% [9]. In China, which has the largest elderly population in the world, the overall prevalence of depression in the elderly population is as high as 36.8% [10]. Rong Jian et al., using meta-analysis, systematically reviewed cross-sectional literature and found that in the past 10 years, the prevalence of depressive symptoms in the elderly aged 60 and above in China was 25.55%, especially in the rural areas of China, the prevalence of depressive symptoms reached 31.02%[11]. Therefore, at present, the depression status of the elderly in China is not optimistic. Depression will affect the mental state and quality of life of the elderly: Depression will not only aggravate the psychological loneliness and social deprivation of the elderly, damage physical and mental health, and reduce the quality of life, long-term depression is easy to develop into pathological psychological disorders, and even cause and aggravate various diseases, affect the quality of life of the elderly in their later years, and even appear suicide and other behaviors [12].

In addition, the occurrence of depressive symptoms will increase the cost of daily care for the elderly, bring a heavy economic burden to the family, and make family members and caregivers face huge care and psychological pressure. Depression in the elderly has become a mental health problem concerned by the society, bringing huge burden of medical costs and social and economic pressure to the society.

The above research shows that geriatric depression affects the health of the elderly in different aspects and to different degrees, leading to a decline in the quality of life of the elderly, an increase in economic burden, more obvious depressive symptoms, and a vicious circle. Therefore, to find out the influencing factors of depression in the elderly, make clear the correlation between the influencing factors and depression in the elderly, and carry out intervention, in order to reduce the depression of the elderly, so that the elderly can face the life in their later years with a healthy and optimistic attitude.

## 5. The Causes of Geriatric Depression

At present, the research results on the causes of depressive symptoms in the elderly have been very rich. In the past, most of the studies on the causes of geriatric depression were from three aspects: physiological factors, psychological factors and social factors.

### 5.1. Physiological Factors

Physiological factors: The study found that suffering from

physical diseases is one of the high risk factors for depression in the elderly. The appearance of physical illness is a very important stressful event for the elderly, and if it is not well handled, it will easily lead to depression. At present, the research on physical health and depressive symptoms in the elderly mainly focuses on two aspects: physical function and chronic disease. In terms of physical function, scholars mainly consider the effects of daily activity ability, instrumental daily activity ability, hearing impairment, visual impairment, pain and other factors on depressive symptoms in the elderly. Ai Yating et al found that the daily activity ability score was positively correlated with depression score, while the instrumental daily activity ability was more correlated with depression score in the elderly[13]. A longitudinal study on Aging in the United Kingdom also found that self-reported hearing and vision impairment was significantly positively correlated with depression in the elderly [14]. In addition, Feng Qiangwei et al also found that the more chronic diseases the elderly had, the more likely they were to develop depressive symptoms [15]. Obviously, with the growth of age, the elderly will gradually weaken their various organs and their activity ability will gradually decline. The decline in their self-ability will lead to a decreased sense of self-control and even a sense of worthlessness, which will increase their fear of aging and death, and thus prone to depression symptoms.

### 5.2. Psychological Factors

Usually with the increase of age, the elderly will not only have a decline in physical functions, but also some changes in personality characteristics. Especially after the elderly retire from their jobs, their social roles will often change greatly, leaving the life, work environment and interpersonal network that they have been accustomed to for many years, the social interaction activities of the elderly will be significantly reduced, at the same time, almost all children have their own families, and the communication with the elderly will gradually decrease. The changes in physical and social roles make some elderly people lack a sense of control and unneeded feeling, which leads to a sense of worthlessness, leading to depression. In addition, as their memory deteriorates, they become chatty and their mood swings become more irritable, which can lead to unhappiness, tiredness and even neglect in young people. These changes in attitude can easily lead to loneliness, low self-esteem and a sense of loss among the elderly.

### 5.3. Social Factors

Social support is a very important environmental resource. In an individual's social life, social support can affect an individual's behavior and physical and mental health. Previous studies mainly focused on the social support received by the elderly and its influencing factors, revealing that the social support of the elderly is at a moderate level and is affected by multiple factors such as individuals, families and communities. In recent years, researchers have begun to pay attention to the role of the elderly not only as recipients but also as providers in the social support network. A number of studies have shown that elderly people receiving support can significantly improve their sense of self-esteem and affection, and reduce their sense of loneliness. Li et al found that intergenerational relationship and family social support are negatively correlated with depression in elderly people, and family social support plays an intermediary role between

intergenerational relationship and depression[16]. Intergenerational relationship and family social support are negatively correlated with the level of depression in the elderly, and family social support plays a mediating role between intergenerational relationship and depression. He et al., using CLASS data for their analysis, found a significant correlation between pension and lower levels of depressive symptoms[17]. Among them, there are also studies involving two-way social support and depression in the elderly: some studies show that two-way social support is closely related to depressive mood, and Shang Weiting et al.'s study shows that both two-way care support and emotional support have a positive effect on alleviating depressive symptoms [18].

It is not difficult to find from the above research on the causes of geriatric depression: existing studies have shown that the sense of control, social support and mental health are closely related: the sense of control can negatively predict depression, and two-way social support, whether receiving support from others or providing support to others, is closely related to the mental health of the elderly.

## **6. Research Progress of Psychological Intervention in Geriatric Depressive Symptoms**

### **6.1. Research Progress on Psychological Intervention of Geriatric Depressive Symptoms in International**

At present, the international intervention measures on depressive symptoms in the elderly mainly include: Early prevention of depressive symptoms, cognitive behavioural therapies (CBT), Reminiscence therapy (RT), Problem Solving Treatment, PST); Music therapy; Support therapy.

Early prevention involves interventions that target designated groups or those at high risk. Focus on populations with risk factors for the disease (such as family history) and point to interventions; And focus on people with signs or symptoms of early disease. The study by Almeida discusses strategies for developing appropriate primary prevention (including universal, selective and directive prevention), secondary and tertiary prevention for risk factors, and demonstrates through data that selective and directed prevention interventions are feasible[19].

In terms of CBT, Joling KJ et al. investigated the effect of reading therapy on depression symptoms in 170 community-living elderly people in the northwestern part of the Netherlands through a randomised controlled trial[20]. The reading therapy intervention included an information leaflet and a self-help manual for older people, Coping with Depression. After 3 months, the proportion of significant improvement in depressive symptom scores before and after the intervention was compared according to the CES-D scale. The results found that reading therapy, as a stand-alone intervention for adults 75 years and older, did not reduce depressive symptoms more than usual care. It may suggest that reading therapy is only effective for patients who are motivated and admit they are depressed. In China, CBT therapy has also been applied in the intervention of geriatric depression. Nie Beibei et al. divided 90 patients with geriatric depression symptoms into two groups, and conducted cognitive behavioral intervention for the observation group, mainly through establishing the doctor-patient relationship, communicating with the patients, correcting their negative

cognition, and through music induction and rehabilitation training[21]. The results showed that patients' mental health level could be significantly improved by this intervention method.

In terms of RT therapy, Preschl B et al studied the treatment of depressive symptoms in people aged 65 years and older using life review therapy[22]. A total of 36 subjects with elevated levels of depressive symptoms were randomly assigned to the treatment group or wait-list control group and completed a post-assessment. Fourteen people in the intervention group completed the follow-up assessment. The results showed significant changes in depressive symptoms, well-being, self-esteem, and OCD recall from pre-treatment to post-treatment or follow-up; Life review therapy can be recommended for elderly patients with depression and can improve depressive symptoms. In China, CAI Mu conducted a study on the depressed mood of elderly hospitalized patients with chronic diseases through individual nostalgia therapy. The observation group was administered individual nostalgia therapy for 6 weeks, and the results showed that individual nostalgia therapy could effectively alleviate the negative mood of elderly patients with depressive symptoms[23]. Ning Xuemei et al divided 86 patients with post-stroke depression symptoms into groups in Chengdu community health service center, and implemented structured nostalgia therapy for the intervention group. The analysis of depression symptoms before and after intervention found that structured group nostalgia therapy had a significant effect on alleviating depression in stroke patients [24].

In the study of PST therapy, Gellis ZD et al. adopted a randomized controlled trial[25]. To evaluate the efficacy of Integrated Telehealth Education and Activation of Mood (I-TEAM) in improving depressive symptoms in a home health care setting. A 3-month intervention of 102 older adults in the intervention group provided problem solving therapy for depressive symptoms eight times a week; And provided communication with the participants' primary care physicians while also prescribing antidepressant medication. Comparing measurements of depressive symptoms between the two groups at baseline and at 3 and 6 months after baseline, results showed that I-TEAM for older adults with depressive symptoms could reduce symptoms in home health Settings and use of ED after discharge.

### **6.2. Research Progress on Psychological Intervention of Geriatric Depressive Symptoms in China**

Music therapy and supportive therapy are also commonly used in elderly depression interventions in China.

Music therapy is a method of treating psychological problems by playing a variety of theme music, which has been widely used in the fields of medicine and psychology. Through music therapy, Yu Wei's research on the elderly in a social welfare institute in Wuhan found that music therapy played a positive role in treating the symptoms of geriatric depression, and could improve the mental health level of elderly patients with depressive symptoms [26].

Supportive psychological intervention means to make patients have a systematic understanding of the concept of social support through communication, so as to relieve their psychological pressure, correctly understand their actual situation, and improve their mental health. Wan Xiaoyan divided the elderly patients with depressive symptoms into two groups according to the way of drawing lot, and used

supportive psychological intervention therapy for the experimental group. The results showed that for depressed patients, supportive psychological intervention can improve their mood and enhance their satisfaction level of nursing work[27].

Comparing the literature on intervention strategies for geriatric depression symptoms in China and internationally, it is found that there is little difference between the intervention strategies for geriatric depression adopted in China and internationally. However, there are few relevant studies in China, and most of them focus on hospitalized patients, individuals with special illnesses, and elderly people in nursing institutions, and no intervention strategies have been found for the elderly population in the community. Most of the intervention strategies are highly professional, and it is difficult to apply them. Especially, there are few studies on intervention strategies in the early prevention stage.

## 7. Thinking and Prospect

After sorting out the existing literature, we find that the research on geriatric depression mainly focuses on its current situation, causes and influencing factors. The existing research results clearly point out that a sense of control and social support are important factors in mental health. Specifically, sense of control has a negative predictive effect on depression, that is, a higher sense of control can reduce the risk of depression. At the same time, two-way social support -- both receiving it from others and providing it to others -- is strongly associated with mental health in older adults.

It can be seen that both sense of control and two-way social support have significant effects on geriatric depression. It is worth noting that two-way social support may also affect the elderly's sense of control. Therefore, future research is necessary to delve deeper into the complex relationship between feelings of control, two-way social support, and geriatric depression.

Specifically, we need to clarify whether there is a decline in older adults' sense of control, and whether this decline leads to adverse effects on geriatric depression. At the same time, we need to study whether two-way social support can mitigate this adverse effect to some extent. Based on these studies, we may be able to develop more effective early preventive interventions to prevent geriatric depression and significantly improve mental health in older adults.

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