



A Multi-country Analysis of the Treatment Options for Late-life Depression in Geriatric Patients

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Abstract

In many countries around the world, the geriatric population is still one group that lacks proper healthcare. Further, the prevalence of mental illnesses, like late-life depression, grows in the elderly as costs of care, family separation, and inexistence of government support increases. Despite these circumstances, the geriatric population seems to be growing day by day. The purpose of this paper is to bring awareness to late-life depression present in the elderly population. The main body of the paper is separated based on the different countries that were discussed (China, India, and the United States). The different cultural beliefs each country contains were identified. These differences brought attention to how late-life depression may be prevalent in the different countries. Lastly, with the cultural differences in mind, various treatment options were proposed to aid the geriatric population in each country. As the paper progressed, it was clear to see that cultural differences truly affected which therapies certain elderly individuals will be the most responsive to. Thus, there is no one true winner in the many solutions given. As a result, future research on this subject may be on identifying a proper treatment that could work universally with cultural beliefs in mind.

Keywords: Multi Country Analysis; Late Life Depression; Geriatric Patients; Cultural Differences; Therapies for Depression; Individual Responses to Therapy

Introduction

Oftentimes when discussing mental health, the geriatric population is one of the most overlooked groups of interest. Interestingly, about 20% of the universal geriatric population (ages 60 and over) suffer from mental disorders [1]. These mental illnesses range from cognitive impairment like dementia to mood disorders like depression [1]. The most common causes for these mental illnesses are health problems, drop in socioeconomic status, and abandonment (placed in nursing homes) [1]. One study by Marjorie Fiske Lowenthal determined that alienation and social isolation are the primary causes for mental illnesses in the geriatric population [2]. In fact, studies have shown depression in the elderly

to have as great an impact as in young adults [3]. By not spending enough time with family and friends, an elder individual may begin feeling left out. These feelings of isolation and loneliness can manifest into depression. Due to these unique reasons, depression in the elderly has been termed 'late-life depression' (LLD).

According to the most recent statistic, approximately 14.7 million of the elderly population live on their own [4]. Likewise, about 1.5 million live in nursing homes, where individuals may be deprived of true human connection, especially from their family and friends [5]. By spending endless hours on their own, feelings of LLD are bound to arise. Recently, with the surge in the COVID-19 pandemic, these feelings of loneliness have heightened. In one

interview, individuals recounted their own experiences in the nursing home during the pandemic. These individuals often felt “more anxious and depressed due to the separation from [their] loved ones” and “if the virus doesn’t kill [them] the loneliness will” [6]. The participants mentioned how had there been less restrictions and more improved communication with friends and family, they would not have felt so discouraged [6].

In recent years, caretakers and scientists specialized in the elderly have come together to find solutions to alleviate the pain felt by the elderly. One study by Scott D. Crespy and others in 2016 evaluated the ‘Promoting Positive Well-Being (PPW) Program’ as a therapeutic to help the elderly be relieved from their mental illness [7]. This program provides quality “tools and strategies designed to assist nursing home care teams in early identification, assessment, treatment and monitoring of residents with depressive symptoms” [7]. The study utilized 40 nursing homes and divided the sample in half, 20 nursing homes given the PPW and 20 as a control. In the end, the results showed promising solutions to help the elderly population, about a 58% reduction in depressive symptoms in the active group [7]. So far, this exact program has not been implemented on a national level, but similar programs have. Other nursing homes or senior living centers have incorporated this method into their care. Although a proper evaluation of this solution over a broader geriatric population is still needed, the hope this solution brings has highlighted the importance of this specific group in terms of mental health.

This literature review aims to discuss the various solutions brought up to help the elderly population. This paper will focus on various countries and how the culture of each affects their approach to helping the elderly. Specifically, three countries will be the focus of this paper: China, India, and the United States. These countries have the largest geriatric populations to date. Thus, it is best to see how these countries specifically care for their elderly. There will be clear definitions of the culture in each country and how each treat their elderly to justify for the solutions offered. After the discussion of each country, an evaluation of each solution proposed will be provided to compare the therapeutics offered. As a result, the literature review can truly determine what is the optimal solution to aid the elderly population in the battle against LLD.

The next pages will focus on the three different countries and discuss their geriatric population, culture, and treatments available for LLD.

China

China currently has the largest geriatric population. It is estimated that about 264 million Chinese individuals are a part of the elderly population, and this number will grow to 330 million by 2050 [8]. As the numbers expands, rapid changes may be evident in the country to cope with the growing population. In coming years, the ratio between the young and old will severely be imbalanced and place more hardships on the younger generation to care for the elderly. To explain, due to China’s one-child policy, there will be an even larger elderly population in the near future compared to the younger ages [9]. As a result, there will be less resources and individuals available to care for the geriatric population.

In the past, the majority of Chinese families lived in three-generation families, in which the grandparents, parents, and children all lived together [10]. This style of living aided the Chinese culture of respecting elders and considering them as “the treasure in the family” [10]. However, as more young adults grow and begin living a more contemporary lifestyle, their desire to live in three-generation homes diminishes. According to a study performed by Chen and Silverstein, older Chinese individuals in the current society are more likely to live in different households than their first relatives compared to the past [11]. Moreover, the desire to care for elders also severely declines as adults begin to prioritize careers more than family.

The rise in economic well-being of many families has also led parents to invest more money into their children than elderly care [10]. As a result, the care for the geriatric population becomes less of a problem for families and more of an issue for government and public health policymakers. Efforts for government-funded care for the elderly have become more prioritized for policymakers in order to benefit the country. The main solution that government officials can come up with for these individuals is to place them in long-term care. Up until recently, however, this elder care was only approved for elders with “no children, no income, and no relatives” [12]. As the elder population grew, the number of these government-run facilities have steadily increased, accepting more individuals who privately paid for their own residence in these locations [12].

This separation from family and close relatives in nursing homes can lead to feelings of isolation, worthlessness, and guilt in

the elderly population. These individuals have lived the majority of their lives in an era where Confucianism's principle of filial piety was highly valued [13]. As this moral becomes less appreciated in the current Chinese world, the elderly residing this country may not feel as respected or wanted, which can lead to feelings of LLD. In fact, in a 2019 study performed by Bao-Liang Zhong and others, there was an "estimated prevalence of major depressive disorder of 30.6% in older adults in primary care" [14]. The participants of this study were followed for a period of time and each had "sought treatment at any of the included primary care centers" involved in the study. Through this study, the great need for mental health services in China was identified [14].

With the growing geriatric population in China, there is a very high chance that the proportion of individuals who suffer from LLD constantly increases. As a response to this upcoming crisis in China, scientists have attempted to incorporate several therapies or solutions to diminish the prevalence of LLD amongst the elderly. A few of the key proposals are discussed below.

Interpersonal psychotherapy (IPT)

The interpersonal psychotherapy method is a type of therapy that connects "interpersonal events and depressed mood" [15]. The main idea is to make the patient not feel as though depression is not treatable. By linking depressive episodes to specific interpersonal problems, the individual can resolve the issue, and reduce the depressive symptoms [15].

This treatment method has been widely used for major depression, but its impact on late-life depression is less unknown. In one study directed by Hua Xu and Diana Koszycki, the influence that IPT can have on older adults in China was examined. In this study, the authors offered several different formats of IPT that can be established into Chinese society. For example, a group format for IPT can be "practical and efficient" in terms of China's "rapidly aging population" and also provide "social support" for the individuals who feel "lonely, isolated, and stigmatized" [15].

Chinese taoist cognitive therapy

Chinese Taoist Cognitive Therapy (CTCT) is a type of therapy created by Desen Yang, who is a Chinese psychiatrist. The importance of CTCT is that it takes into account the values of Taoism, which is an Eastern philosophy, and imbeds it into the

psychotherapy practice. In other words, it combines ideas of cognitive behavioral therapy with the cultural values of Taoism [16]. Since elder Chinese adults are more traditional, this type of therapy is seen as beneficial and successful in treating LDD.

CTCT has five stages, named ABCDE (actual stress, belief system, conflict and coping style, doctrine direction, and effect evaluation) [16]. A study performed by Yudan Ding and others attempted to assess the effectiveness of this therapy on the elderly population in China. Based on the data, it appears as though the implementation of CTCT "significantly reduced depressive symptoms" and even "with a small positive effect" [16].

Psychological, drug treatment, and health education (PDH) intervention

The purpose of PDH is to expose patients to different aspects of therapy in order to ensure that all methods are covered. According to Li Duan and others, no proper study has been performed that includes all different types of therapeutics. Past studies simply focus on one aspect, whether that be "pharmacotherapy, psychosocial intervention, or health education" [17]. The purpose of this study was to prove to others that all aspects are necessary for proper treatment and set a guideline for future interventions and health management. PDH appears to be beneficial for the Chinese geriatric population because it takes on a holistic approach to treating those who may not have access to full resources.

India

Currently, India's population stands at an estimated 1.39 billion, and roughly 139 million of those individuals are over the age of 60 and part of the elderly population. Similar to China's population growth, India's geriatric population is also expected to nearly double to almost 319 million people by 2050 [18]. This rapid growth can be seen as a hardship in terms of finding elder care. The general urbanization of the world leads to less resources and time needed to care for the elders.

With the intense modernization occurring in India, many of the women, who (in the past) were responsible for caring for the elders, will not be able to dedicate as much time to elder care [19]. There becomes a greater need for "integrating care needs of older and younger family members" while also maintaining a reliable job [19]. Similar to China, three-generation residences are very

common in India, and the sudden transformation of Indian culture proves to decline the percentage of these type of homes [19]. The lack of true and consistent care for the elderly makes government help and policy more favorable. In fact, in 2007 a bill named "Maintenance and Welfare of Parents and Senior Citizens Act" was passed to ensure that the parents and younger family members will care for the elders, or there would be "penal provisions" due to their abandonment [19].

Another issue is that many of the elderly live in rural areas, where medical care is not as easily accessible as the cities. More families move to the cities in search for job opportunities, which limits the medical care that the geriatric population can attain. In 2011, the Government of India created the National Program for the Health Care of Elderly, and the goal was to build access to varying levels of health care for those who many not be able to gain the treatment on their own [20].

Overall, though there are some programs available to make up for the undesired change in elder care, the lack of familial responsibility is what truly separates elders from reaching a healthy wellbeing. According to Professor N. K. Chadha, the elderly are respectable individuals who "are generally obeyed, revered, considered fountains of knowledge and wisdom, and treated with respect ... by family and community members" [21]. The older women are considered excellent caregivers while the older men are deemed as the "watchdogs" of the family to ensure everything is going well. Many older Indian individuals believe that "living with grandparents is not an obligation but a necessity" to flourish the children's lives with knowledge and advice from past generational experience [22]. This provides the grandparents and elder individuals with a sense of purpose and a meaning for their lives. However, with the changing times, it is clear to see that a lot of the responsibilities the elderly once had are no longer applicable. Thus, an unwanted gap is formed between the young families and the elderly.

An estimated 34.4% of India's elderly population are diagnosed with depression [22]. One of the greatest obstacles to serving the large number of individuals suffering from this mental disorder is that there is a high level of stigma revolving mental health disorders and mental health services. Thus, though there may be some opportunities available to receive treatment, the

patients diagnosed with these disorders may not desire to gain treatment due to guilt or shame brought on by those who know them. Likewise, the healthcare system in developing countries like India are still very new to mental health services, so they are "not resilient enough to deal with mental health problems including depressive disorders" [22].

In terms of late-life depression prevention and treatment in India, it must be taken into account the mental health stigma and lack of proper resources available in the country. As a result, a few solutions have been created to cater to the Indian elderly population. Interestingly, most of the therapies involve psychoeducation. Three of these solutions are listed and discussed below.

DIL strategy

DIL stands for 'Depression in Late Life' and it is a type of therapy developed by Dr. Charles F. Reynolds and others. In the study performed by Dr. Reynolds and his fellow scientists, older adults from Goa, India participated in the study. This strategy is "grounded in problem solving therapy for primary care and brief behavioral treatment for insomnia" [23]. The unique factor of this type of therapy is that it is delivered by "lay health counselors" and also includes a level of psychoeducation to educate the patients about their diagnosis and the symptoms. Since a large proportion of the Indian elderly who may receive treatment with this method are illiterate, the researchers have also attempted to use figures to demonstrate the stressful events that the patients may feel.

Psychoeducation

In a study performed by Archana Singh and others in 2020, the term psychoeducation was used to name the type of intervention used to treat late life depression in Indian adults. Specifically, psychoeducation is a "proof-based therapeutic intervention for patients and their caretakers/family members that provides plenty of information and support for better understanding and coping with the illness" [24]. One of the key reasons why this method of treatment may be useful to the Indian geriatric population is because it is an effective way to also remove the stigma in relation to mental illnesses (which is a prevalent issue in India). The authors of the study were confident that psychoeducation would "enhance a patient's confidence in the treatment of their illness" if they have knowledge about the procedure and benefits [24].

Mindfulness-based cognitive therapy (MBCT)

The MBCT therapy utilizes psychoeducation to teach patients about their depression and the concept of mindfulness. Specifically, patients are taught “to treat thoughts, not as facts, but as passing mental events and to skillfully observe and let them go” [25]. As a result, the feelings of sadness would be attached to actual events, and resolving those events will be easier. In one study, the MBCT method involved providing the patients with homework exercises that will help them grow their mindfulness in order to better help them with their mental disorder [25].

The United States

According to the Administration for Community Living, roughly 54.1 million elder individuals live in the United States in 2019, which covers about 16.1% of the entire U.S. population [26]. The main reason that such a large proportion of individuals make up the geriatric population in the United States is because most of these people are considered ‘Baby Boomers’. This term describes children born between 1946 and 1964 after the end of World War II. Recently, younger individuals have recognized the so-called “Baby Boomer Problem”: which involves the “challenge of assuring that sufficient resources and an effective service system are available in thirty years when the elderly population doubles” [27]. Like in the other countries, the rise in geriatric population will become a hardship in terms of care, resources, and funds available.

In a study conducted by James R. Knickman in 2002, the estimated cost of medical treatment for a senior citizen in the United States was approximately \$90,000, which includes uncovered prescription drugs, medical care, insurance premiums, and long-term care [27]. Close to two decades later, it is reasonable to assume that the average cost of these same necessities will be much higher. The author of the same article makes the argument that there will be a “rapid inflation in expenditures” in the near future, and this could become a large burden for those who are lower in socioeconomic status.

Additionally, according to Sara R. Curran and others, there is a greater possibility that children of divorced parents are less likely to care for their elders in the future [28]. This issue directly correlates to the United States, which has one of the leading divorce rates across the world. It was estimated that only about 56% of the elderly will be cared for by the younger adults versus a 71%

if the parents had remained married [28]. Overall, the reduction in elderly care requires more government influence or public help. Nursing homes, being a main way to provide care for the elderly, are also running into bed shortage and cost controlling problems. Patients who rely on Medicaid can pay their nursing home costs through insurance. However, the reduction in payments made by Medicaid patients can lead to more preference towards private patients (those who pay without Medicaid).

All in all, the cost of medical expenses for the elderly seems to be the largest factor in leading to a difficult life. The inability to pay these costs can lead to much stress in one’s life and create worry for the remaining of the future. The lack of support from family and friends can not only hinder the geriatric population’s ability to survive happily, but it will also drive a wedge between the family. The elderly will remain in assisted living centers or their own community homes for the time being until they are no longer able to pay for those costs. As these stressors add up in their life, a greater chance for late life depression is bound to occur.

More than 7 million individuals part of the geriatric population rely on long-term care to help on the day to day. If these individuals persist with a mental illness like depression, then their life becomes even more difficult. In the United States, several treatments have been uncovered to assist the geriatric population. A few of these ideas have been discussed below in further detail.

ENGAGE therapy

ENGAGE therapy is a type of therapy that is rooted in neurobiology and the psychology of the human mind. Specifically, it utilizes behavioral techniques to train the human mind to think outside of depressive thoughts. The therapy involves patients engaging in meaningful and rewarding activities. Therapists implement these activities in order to remove the barriers for reward exposure. Examples of these “domains” include negativity bias, apathy, and emotional dysregulation [29]. With these barriers in the way, patients cannot fully move away from their depression.

Life-Review therapy

Life-Review therapy utilizes reminiscence and reviewing one’s life as a therapy. Specifically, patients will “resolve, reorganize, and reintegrate what is troubling or preoccupying him [or her]” [30]. In one study, there was an 84% success rate for the usage of

reminiscence and life review on reducing depressive symptoms. This type of therapy is favorable for the elderly population because these individuals often think back on their lives and their own experiences. By reforming their thinking in a way to aid their ability to heal their mental conscience, then a simple activity will be advantageous.

IMPACT therapy

IMPACT therapy is unique to other treatments for depression because it is held in a primary care setting compared to a mental health specialty clinic. According to a study performed by Jurgen Unutzer and colleagues, geriatric population preferred IMPACT treatment compared to normal treatment controls and led to "greater improvements in their depressive symptoms, more frequent treatment, greater satisfaction with their treatment, and a higher quality of life at the study's end" [31]. It is understandable that elder patients would feel more comfortable receiving treatment for their mental condition in a place where they are normally treated. Thus, these individuals will not feel as though their late-life depression is a disorder that is out of the norm.

Conclusion

Late-life depression is a prevalent illness that needs more attention brought to it. This mental disorder is commonly found in the elderly population, especially those 65 years or older. Oftentimes, these individuals do not receive treatment for this condition because of two main ideologies: either the patient sees no reason to go out in search for treatment, or there is lack of proper treatment available in that area. As the geriatric population continues to grow, resolving the symptoms of late-life depression becomes more of a crisis. Families, friends, and scientists work together to discover more therapeutic interventions for the elderly. Specifically, these treatments should not only align with cultural beliefs, but they should also be accommodating for the geriatric population. It is obvious that the geriatric population have different needs and desires compared to other younger populations, and different treatments for depression should be utilized as such.

The purpose of this literature review was to emphasize the importance of late-life depression within the geriatric population. Examples of proposed treatments for these individuals were also discussed. One important distinction between this literature review and others is that this paper focuses on the importance

of culture. In doing so, a treatment created in one region may not be successful in another location whose cultural beliefs clash. Likewise, the impact of changing times and modernization was also highlighted to discuss why new treatments must be implemented to accommodate for the growing geriatric population who may not have proper access to care. The literature review focuses specifically on three major countries who have a large geriatric population. Each country (China, India, and the United States) had its own section where the geriatric population, cultural impact, and possible treatment options were examined.

Although the original purpose of the literature review was to possibly determine the most optimal treatment for late-life depression, through the progression of the paper, it is clear to see that the goal proposed may be difficult. As seen in the main body of the paper, each country discussed in this paper identified with such different cultural beliefs. Even though there were some similarities between certain countries, it is impossible to find one solution to help all three. As a result, the goal of the paper should be reworded to highlight the significance of each country's culture and the possible treatments that would be the most successful in each region.

Overall, what the audience should take away from this literature review is the prevalence of depression in the geriatric population. As more people are aware of this group of interest, there will be more treatments proposed to aid the elderly population. The stigma surrounding mental illness will dissipate and the world can move on to a state where equal healthcare for all is attainable.

Future Trends

Although this literature review provided useful information in terms of the importance of LLD in the geriatric population, the issue of finding the best therapeutic intervention is still unsolved. Future research in the geriatric population will help improve the data the world has in terms of mental illnesses associated with the elderly. Research in this subject should look more into finding a proper treatment for geriatric LLD. More specifically, it can be seen that cultural differences amongst various countries impacts the ability to find a universal solution. Thus, if future research focused on finding the most optimal LLD intervention for each country (or culture), or even better, a world-wide solution to LLD, then elder care can be more obtainable. In doing so, elder individuals all over the world can gain the care they deserve.

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