A technology-based future for psychotherapy

Despite suffering from high rates of depression, homebound older adults often have limited access to clinic-based psychotherapy. **Professor Namkee Choi** from the University of Texas has been investigating how videoconferencing can be used to deliver cost-effective mental health care for low-income homebound older adults suffering from depression.

Homebound older adults suffering from chronic medical conditions, mobility impairments and financial stress are particularly susceptible to social isolation and often experience depression. Recent studies have found that these older adults suffer from clinically significant depressive symptoms at rates two to three times higher than their mobile peers. Despite their high rates of depression, these older adults face significant barriers to accessing effective, evidence-based psychotherapy or other psychosocial interventions due to their homebound state, financial hardship and lack of transportation.

THE BARRIERS TO TREATMENT

Psychotherapy treatments available at present are largely clinic-based. This limits low-income homebound older adults' access given their mobility impairment and transport limitations. Other systemic access barriers include difficulties in scheduling appointments around existing primary care commitments, a notable shortage of licensed psychotherapists for older patients, and treatment cost. Personal barriers include the perceived stigma of mental health issues, denial of depression, lack of motivation and reliance on religious faith as the primary means of coping.

Depression is commonly treated with pharmacotherapy (i.e., antidepressants). However, pharmacotherapy has shown limited effect on tackling depression in low-income homebound older adults: antidepressants can provide a short-term relief but do not provide a framework of how to cope with the many daily stressors that these older adults experience.

With rapidly increasing numbers of older adults, there is a growing need for accessible, affordable and effective psychotherapy or other psychosocial interventions to treat depression in this population group. Since 2009, Dr Choi has been exploring how technology can be capitalised on to address this need and improve access and patient healthcare outcomes.

IN-HOME VIDEOCONFERENCED PROBLEM-SOLVING THERAPY

Dr Choi's research between 2009 and 2012 tested videoconferenced problem-solving therapy (tele-PST). Originating from the cognitive-behavioural theory, PST is a short-term, structured treatment based on the idea that people who struggle with problem-solving skills are less able to cope with high levels of stress and are therefore more susceptible to depression. PST is focused on providing practical, 'here and now' problem solving skills and behavioural activation and is therefore particularly well suited to helping older disadvantaged sufferers of depression to cope with daily stressors. Dr Choi's research, funded by the US National Institute of Mental Health, investigated whether five–six sessions of PST could be tele-delivered for homebound older adults in their own homes.

Although tele-therapy has been growing in popularity over the last decade, it has generally been confined to office-/clinic-based videoconferencing or telephone-administered care. Dr Choi's research took this approach one step further, implementing home-based tele-therapy. In a randomised controlled trial, Dr Choi compared the acceptance and efficacy of home-based tele-PST to those of in-person PST (i.e., therapists conducted PST sessions face-to-face at older adults' homes) and care call (regular telephone calls providing support and monitoring of depressive symptoms). The participants in this study were referred by case managers of ageing service agencies that served low-income disabled/homebound older adults.

The study found that tele-PST was more acceptable than in-person PST. An absolute majority of tele-PST participants were highly satisfied with tele-sessions' convenience. 12-week follow-up assessments showed that compared to care calls, both tele-PST and in-person PST were more effective in reducing depressive symptoms. However, at 36 weeks, compared to both in-person PST participants and care call participants, tele-PST participants had significantly lower levels of depressive symptoms (measured with the 24-item Hamilton Rating Scale for Depression) and disability (day-to-day difficulties due to health conditions, either mental or medical, measured with the 12-item World Health Organization Disability Assessment Schedule).

According to Dr Choi, tele-PST's higher long-term effectiveness can be attributed to a combination of factors. Firstly, patients were found to experience a high sense of achievement at mastering a new, previously unknown technology and took pride in 'joining the technical age'. Secondly, patients enjoyed the comfort and convenience of in-home tele-sessions. Thirdly, therapists reported that patients were often more focused during tele-sessions than in-person sessions. Distractions that commonly occur during in-person, in-home therapy, such as answering the phone, getting a drink etc. were rare during tele-PST sessions, suggesting that the use of technology facilitated higher engagement in the therapy while allowing the same benefits of face-to-face therapy sessions.

> **An absolute majority of tele-PST participants were highly satisfied with tele-sessions' convenience**

Alongside enhanced patient outcomes, Dr Choi also stresses the additional benefits of tele-delivery that eliminates the need for older adults to travel to see a therapist or the need for a therapist to travel to see homebound older adults. Savings from travel time and costs mean reduced treatment costs and also allow one therapist to see more patients. Thus, tele-therapy offers a sustainable, economic and effective alternative to in-person therapy.

TRAINING THE WORKFORCE FOR A SUSTAINABLE MENTAL HEALTH CARE DELIVERY MODEL

While Dr Choi's research clearly indicates the acceptance and efficacy of tele-PST for underserved older adults, the access to this mode of psychotherapy is still ultimately limited in real-world settings due to the current and projected shortage of licensed geriatric mental health clinicians. In the United States, most states have strict licensing laws allowing only licensed master's- or PhD-level clinicians to practise psychotherapy. However, in other countries, lay mental health workers have been proven to deliver effective interventions for underserved population groups.

With funding from the US National Institute on Minority Health and Health Disparities,

Dr Choi demonstrates a mental health care delivery model that can improve access to evidence-based treatment for underserved population groups

Dr Choi is currently testing comparative clinical and cost effectiveness of tele-delivered self-care management support (tele-SCM) for homebound older adults by lay (i.e., bachelor's-level) mental health providers versus tele-PST by master's-level psychotherapists. Like PST, SCM is a short-term (five weekly sessions and two monthly booster calls), structured treatment focusing on behavioural activation, an evidence-based depression treatment. Participants learn systematic steps to engage in healthy behaviours and better self-care and maintain social connections. The study shows that after 40–50 hours of training in the manualised tele-SCM treatment modality, lay providers can effectively deliver the intervention. Preliminary outcomes also show that tele-SCM is likely to be as acceptable and effective as tele-PST.

The current study also aims at testing if tele-delivered, short-term depression treatment (i.e., tele-SCM or tele-PST) that is integrated in an ageing service agency (Meals on Wheels Central Texas in this case) will increase older adults' willingness to seek treatment. In Dr Choi's earlier tele-PST efficacy study, case managers reported very low levels of consent (10–20%) from those older adults who met the referral criteria. Case managers cited multiple reasons for this lack of uptake: fear and pessimism of a new treatment and mistrust of mental health providers; religious coping; denial of depression; lack of time, energy or motivation; and stigma and discomfort associated with seeking treatment for depression.

In the current tele-SCM and tele-PST study, SCM and PST providers are co-located in the agency and coordinate care with the participants' case managers. Given low-income homebound older adults' needs for both social and mental health services, care coordination is an important strategy. Preliminary results show that older adults tend to be more receptive to depression treatment when they are told that it is part of the agency services; however, to date, the consent rate has been still at about 50%, while treatment dropout is rare once they engage in treatment.

FUTURE DIRECTIONS

Dr Choi's work sets the stage for a different future for depression treatment for rapidly growing numbers of disabled/homebound older adults. By taking advantage of easily available technology and both licensed professional and lay mental health providers, she demonstrates a mental health care delivery model that can improve access to evidence-based treatment for underserved population groups.

Tele-PST has been shown to be an effective and economic treatment modality. While tele-SCM is still in its testing stage, it also appears to be effective and economic and is likely to be more sustainable than tele-PST given its use of lay mental health providers. Depression treatment integrated in ageing service agencies may also increase older adults' willingness to seek treatment. However, further research needs to address overall low treatment-consent rates among depressed older adults.

Q&A

Your research focuses on low-income homebound older adults. Why is this group particularly susceptible to depression?

Low-income homebound older adults contend with multiple life stressors on a daily basis, which increases their vulnerability to depression. They have to deal with physical, functional and psychological effects of chronic medical conditions and disability. Their homebound state caused by disability also means that they are more socially isolated than their mobile peers. Most low-income homebound older adults lack means of transportation and have to rely on formal and informal support systems to get around. Financial strain is also a significant stressor contributing to these older adults' depression.

Why is problem solving therapy (PST) particularly effective for treating depression in low-income homebound older adults?

PST is a short-term (i.e., five to six sessions in our studies), structured talk therapy. It focuses on "here and now" stressors/problems and teaches patients systematic problem-solving coping skills. It aims at behavioural activation through this problem-solving skills training and daily pleasant activity scheduling. Most older adults who have participated in our study like PST's structured and practical approach to solving problems and its immediate positive effect on their daily lives. As they learn how to better deal with daily stressors, they feel more empowered. Sense of self-efficacy is a powerful antidote to depression.

Your recent studies have been investigating the use of Skype and other videoconferencing platforms to deliver PST to homebound older adults. What sort of feedback have you received?

In our earlier tele-PST study, we used Skype because it is a free programme used by millions of people. In our current study, we are using a videoconferencing platform that is compliant with HIPAA (Health Insurance Portability and Accountability Act of 1996: US legislation that provides data privacy and security provisions for safeguarding medical information). With technological advances, most tele-therapy platforms are low-cost and the cost is likely to go down further.

Many older adults initially expressed reluctance towards videoconferenced sessions, because they had never done them. However, after their first sessions, almost all of them felt comfortable with their tele-sessions and accepted tele-delivery as a great way to engage in treatment. Because a large proportion of low-income older adults, especially those in their 70s and 80s, do not have their own computers and Internet connection (due mostly to the cost of Internet subscription), we have been providing a laptop and wireless card for tele-sessions. The laptops were set up in ways that are easy to use even for those without any prior experience. The problem that we have encountered with videoconferencing is not because of older adults' lack of technological savvy but because of faulty Internet transmissions. When audio and/or video transmissions are not optimal, we have to reschedule tele-sessions and in some cases have to switch to telephone sessions. With continued advancement in telecommunication technology, transmission problems are expected to become fewer in the future. However, wider dissemination and implementation of tele-therapy in the real world requires universal access to an Internet connection as a right, not a privilege, regardless of economic status.

Many case managers have reported low patient uptake. What, in your opinion, are the main steps required to increase patient engagement in tele-therapy?

Older adults in their 70s and 80s have had very limited experience of discussing their mental health issues and treatment other than pharmacotherapy. Many in these age cohorts often feel stigmatised about their depression. They also often misperceive psychotherapy solely as a long-term psychoanalytic psychotherapy and do not want to "dig up the past" especially with a stranger (therapist). Thus, we need to do more work to normalise depression as a treatable medical condition that is no different from other health conditions. We also need to provide more education about short-term, evidence-based psychosocial interventions that focus on "here and now" stressors and behavioural activation.

Also because of our history of institutional racism and mistreatment of mentally ill people, racial/ethnic minority older adults often mistrust mental health providers. Integration of mental health services into ageing service agencies is an important step to reduce their mistrust, as older adults tend to trust their ageing service providers more than mental health providers.

Younger cohorts of older adults in their 50s and 60s are more open to evidence-based psychotherapy; however, low-income individuals are often concerned about treatment cost. Even those with health insurance often cannot afford co-pay given their already high out-of-pocket medical spending. To improve access to mental health care in the real world, we need more funding for mental health services.

Throughout your trials you have received positive feedback from both case managers and patients. What needs to be done to encourage more healthcare providers to use tele-therapy?

I believe most healthcare providers accept tele-therapy as a resource- and time-saving alternative to in-person therapy. However, both public and private health insurance programmes currently have some restrictions about the types of tele-therapy that can be reimbursed. Reimbursement policies for in-home tele-therapy for homebound older adults need to be instituted for wider implementation.

The Older Americans Act (OAA) has some funding available for OAA-funded agencies to directly provide or purchase mental health services (screening, diagnosis, and treatment) for their clients. Ageing service agencies should utilise this funding to integrate mental health services into their existing ageing services. However, the shortage of geriatric mental health service providers is a major challenge especially in health-/mental health- professional shortage areas. That is why I set out to test tele-SCM by lay mental health workers.

Detail

RESEARCH OBJECTIVES

Professor Choi's work focuses on the development and testing of effective treatment delivery models for late-life depression, with a particular focus on the use of technology.

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BIO

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