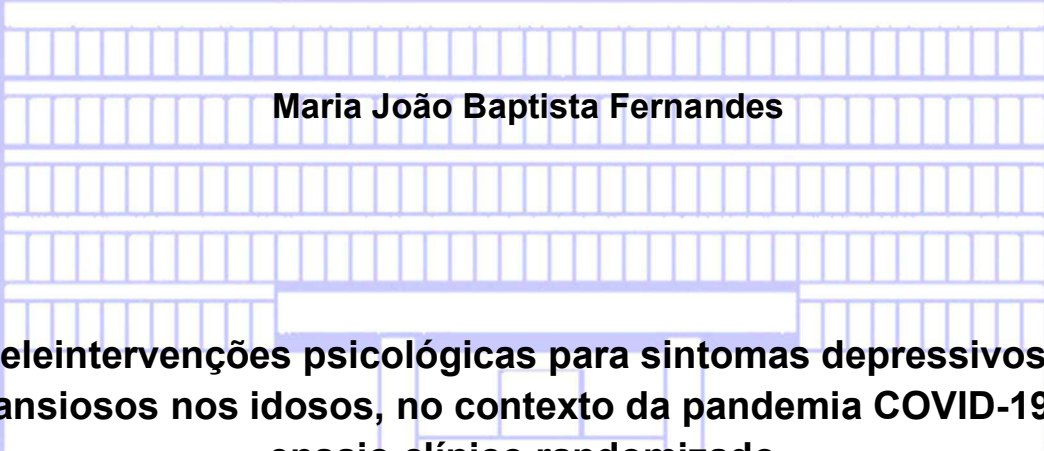


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Teleintervenções psicológicas para sintomas depressivos e ansiosos nos idosos, no contexto da pandemia COVID-19: ensaio clínico randomizado.

UFCSPA

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**Teleintervenções psicológicas para sintomas depressivos e ansiosos
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randomizado.**

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Dedico este trabalho aos meus pais, M^a da Conceição e Modesto, e irmã, Paula, por me terem dado vida... mais de uma vez.

RESUMO

INTRODUÇÃO: Os idosos estiveram vulneráveis a sintomas depressivos e ansiosos no enfrentamento da pandemia de COVID-19. A telemedicina já demonstrou um efeito positivo sobre estes sintomas nessa população e a sua utilização aumentou durante a pandemia, embora poucos ensaios clínicos tenham sido realizados nesse período. **OBJETIVO:** Avaliar a efetividade de teleintervenções cognitivo-comportamental e psicoeducacional no manejo de sintomas depressivos e/ou ansiosos e sentimentos de solidão em idosos da comunidade que enfrentam a pandemia de COVID-19. **MÉTODOS:** Os participantes (n=45) tiveram uma triagem positiva para depressão e/ou ansiedade leve a moderada e foram randomizados para uma intervenção com base em terapia cognitivo comportamental (TCC) ou para uma de psicoeducação, ministradas durante 4 semanas, por terapeutas previamente treinados. A Escala de Depressão Geriátrica (GDS), o Inventário de Ansiedade Geriátrica (GAI) e a Escala de Solidão de Três Itens foram aplicados no início e 2 meses após as intervenções para medir os principais desfechos. A aplicação dos critérios de inclusão e de ambas as psicoterapias foi feita por telefone. Equações de Estimações Generalizadas (GEE) foram utilizadas para avaliar os resultados. As desistências foram submetidas a análise de intenção de tratar (ITT). **RESULTADOS:** Os sintomas de depressão, ansiedade e solidão foram significativamente menores após as teleintervenções de TCC e psicoeducação (GDS: $p < 0,001$, GAI: $p < 0,001$, solidão: $p = 0,003$). No entanto, não houve interação significativa entre grupos em relação ao tipo de intervenção para qualquer desfecho. A diferença média entre a GDS pré e pós-intervenção foi de -2,52 (IC95%: -3,55; -1,49; $p < 0,001$; $d = 0,72$). A diferença média entre o GAI pré e pós-intervenção foi de -4,24 (IC95%: -5,70; -2,79; $p < 0,001$; $d = 0,85$) e a diferença média entre a Escala de Solidão de Três Itens pré e pós-intervenção foi de -0,91 (IC95%: -1,48; -0,34; $p = 0,002$; $d = 0,47$). **CONCLUSÃO:** As psicoterapias breves realizadas por telefone foram igualmente efetivas para sintomas depressivos e ansiosos em idosos que enfrentam condições estressantes como a pandemia de COVID-19, com tamanho de efeito médio a grande. Estes achados devem ser investigados em amostras maiores, sendo

necessárias mais pesquisas para solidificar a base de evidências clínicas de psicoterapias realizadas por telefone em idosos.

Palavras-chave: idosos; saúde mental; COVID-19; telemedicina; psicoeducação; terapia cognitiva comportamental; ensaio controlado randomizado.

ABSTRACT

INTRODUCTION: Older people facing the COVID-19 pandemic were vulnerable to depressive and anxiety symptoms. Telemedicine has already shown a positive effect on these symptoms in the elderly and its use increased during pandemic, although few trials were carried out during that time. **OBJECTIVE:** To evaluate the effectiveness of cognitive behavioral and psychoeducational tele interventions in the management of depressive and/or anxiety symptoms and feelings of loneliness in community-dwelling older adults coping with COVID-19 pandemic. **METHODS:** Participants ($n=45$) had a positive screening for mild to moderate depression and/or anxiety and were randomly allocated to a structured cognitive-behavioral or psychoeducation treatment, which was delivered for 4 weeks by previously trained therapists. Geriatric Depression Scale (GDS), Geriatric Anxiety Inventory (GAI) and the Three-Item Loneliness Scale were applied in the baseline and 2 months after the interventions to measure the main outcomes. Ascertainment of inclusion criteria and both psychotherapies were made by telephone. The Generalized Estimating Equations (GEE) was used to evaluate the outcomes. Dropouts were handled with intention-to-treat (ITT) analysis. **RESULTS:** Symptoms of depression, anxiety and loneliness were significantly lower after tele CBT or tele psychoeducation interventions (GDS: $p < 0.001$, GAI: $p < 0.001$, loneliness: $p = 0.003$). However, there was no significant time-by-group interaction regarding intervention type for any outcome. The mean difference between GDS pre and post-intervention was -2.52 (IC95%: -3.55 ; -1.49 ; $p < 0.001$; $d=0.72$). The mean difference between GAI pre and post-intervention was -4.24 (IC95%: -5.70 ; -2.79 ; $p < 0.001$; $d=0.85$) and the mean difference between the Three-Item Loneliness Scale pre and post-intervention was -0.91 (IC95%: -1.48 ; -0.34 ; $p = 0.002$; $d=0.47$). **CONCLUSION:** Brief psychotherapies delivered by telephone were equally effective for depressive and anxiety symptoms in older adults facing stressing conditions as COVID-19 pandemic, with moderate to large size effects. These findings should be verified in larger samples and more research is needed to solidify the clinical evidence base of telephone-delivered psychotherapies in older adults.

Keywords: older adults; mental health; COVID-19; telemedicine; psychoeducation; cognitive behavioral therapy; randomized controlled trial.

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LISTA DE ABREVIATURAS E SIGLAS

BA Behavioral Activation

CBT Cognitive Behavioral Therapy

COVID-19 *Coronavirus* Disease 2019

GAI Geriatric Anxiety Inventory

GAI–SF Generalized Anxiety Inventory – short form

GDS Geriatric Depression Scale

GEE The Generalized Estimating Equations

IBGE Instituto Brasileiro de Geografia e Estatística

iCBT Internet-delivered CBT

ITT Intention-to-treat Analysis

MINI Mini International Neuropsychiatric Interview

MMSE Mini-Mental State Examination

OMS Organização Mundial da Saúde

PHQ-9 Patient Health Questionnaire

REDCap Research Electronic Data Capture

RCT Randomized Controlled Trial

TCC Terapia Cognitivo Comportamental

UFCSPA Universidade Federal de Ciências da Saúde de Porto Alegre

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1. INTRODUÇÃO

O envelhecimento populacional é um fenômeno que está em rápida ascensão, principalmente em países em desenvolvimento como o Brasil. Sintomas depressivos e/ou ansiosos são prevalentes em idosos, representando um problema de saúde pública (1). Com exceção de transtornos neurocognitivos (*delirium* e demência), transtornos de ansiedade e depressão são os mais comuns nessa faixa etária (2) (3). Apesar de a Ansiedade e Depressão serem frequentes entre os idosos, estes transtornos são muitas vezes subdiagnosticados e, conseqüentemente, subtratados (4), contribuindo para perda de funcionalidade e qualidade de vida, e aumento do risco cardiovascular e morbimortalidade (5) (6). Dessa forma, a avaliação e o tratamento desses transtornos é muito importante.

Nos casos leves a moderados, o manejo terapêutico pode passar por farmacoterapia e/ou psicoterapia (1) (7) (8) (9). Embora antidepressivos sejam eficazes no tratamento da depressão nos idosos, estes podem apresentar um maior risco de eventos adversos devido a múltiplas comorbidades médicas, assim como interações medicamentosas no caso de polifarmácia e, então, psicoterapias podem ser uma opção mais adequada nestes casos (8) (10). Vários trabalhos defendem a psicoterapia como uma alternativa eficaz, mais bem tolerada e mais segura nesta população (7) (8) (9) (11).

A pandemia de COVID-19 acabou por tornar a Telemedicina, antes destinada apenas a pacientes domiciliados ou residentes de áreas rurais (12) (13), em algo mais comum, facilitando o acesso ao cuidado pelos pacientes. Como possíveis vantagens do uso da Telemedicina temos a superação de barreiras relacionadas a diferenças culturais, distância geográfica, deficiências físicas e custos. Porém, é importante lembrar que nem todos os pacientes têm acesso fácil a tecnologias, e que o atendimento dos casos em que o exame físico é imprescindível fica muito limitado (11).

As intervenções de Telepsiquiatria parecem ser tão eficazes quanto as intervenções presenciais (14), além de serem muito bem aceitas por idosos (15).

2. REVISÃO DE LITERATURA

2.1 Envelhecimento da População

O Brasil é um dos países que está experimentando o processo de envelhecimento populacional. Segundo dados do Instituto Brasileiro de Geografia e Estatística (IBGE), a expectativa de vida da população brasileira chegou a 76,8 anos em 2020 (16). Tendo isso em conta, a Organização Mundial da Saúde (OMS) se debruçou e desenvolveu metas e estratégias em várias áreas de cuidado, incluindo questões relacionadas a saúde mental (17), com o intuito de criar melhores condições de vida para idosos e no meio em que se inserem.

2.2 Transtornos Ansiosos e Depressivos em Idosos

A prevalência do Transtorno Depressivo Maior em idosos maiores de 65 anos varia de 1-5% em estudos epidemiológicos (18), e a sua ocorrência aumenta com a idade (8). Por sua vez, a prevalência de Ansiedade em idosos, em amostras da comunidade, varia de 1.2 a 15% e, em cenários clínicos, de 1 a 28% (19). Como referido, apesar da prevalência, esses sintomas muitas vezes são minimizados, ou nem sequer investigados, por profissionais de saúde, sendo vistos como inerentes ao envelhecimento fisiológico. Isso acontece porque frequentemente há um aumento de sintomas somáticos ao invés de pensamentos de preocupação/sintomas emocionais (20), podendo dificultar a avaliação.

A psicoterapia é o tratamento de primeira linha da ansiedade leve a moderada e dos sintomas depressivos em idosos (8) (9), sendo que muitos idosos preferem a psicoterapia ao uso de medicamentos para o tratamento da ansiedade (21). No entanto, além de os idosos procurarem cerca de duas vezes menos os serviços de saúde mental comparando com os adultos mais jovens (22), quando são atendidos é mais provável receberem prescrição de antidepressivos do que serem encaminhados para intervenções psicológicas (23). É importante ressaltar também que terapias farmacológicas podem ter mais efeitos adversos, interações ou até estarem contraindicadas no tratamento de muitos idosos (8).

Atualmente, as evidências de eficácia são mais robustas para a terapia cognitivo-comportamental (TCC), terapia de resolução de problemas e psicoterapia interpessoal na depressão leve a moderada em idosos (24) (25).

2.3 Impacto da Pandemia de COVID-19 na população idosa

A pandemia pelo novo coronavírus, iniciada em dezembro de 2019, na China, causou uma série de impactos na saúde física e mental da população mundial. Os idosos foram particularmente vulneráveis à infecção grave pelo vírus e até morte (26).

Uma das principais medidas recomendadas para evitar a disseminação do vírus foi o distanciamento social. Observou-se uma associação entre esta medida e um aumento da depressão (27), além de a solidão estar associada a ansiedade, insônia, redução do controle inflamatório, alterações do sono e pior qualidade de vida e saúde mental nos idosos (28) (29) (30). O efeito da solidão é comparável a outros fatores de risco para mortalidade, como obesidade e tabagismo (31). Por sua vez, a sensação subjetiva de isolamento e de não pertencer são fatores de risco para suicídio e comprometimento cognitivo em idosos (32) (33). Ademais, a impressão de serem um fardo e senso de inutilidade pode aumentar nesta faixa etária, estando negativamente associada ao envelhecimento bem-sucedido subsequente (34).

O impacto na saúde mental pela pandemia de COVID-19 ainda está sendo avaliado. Além da piora dos sintomas psiquiátricos apresentados, indivíduos com qualquer transtorno mental poderiam já estar naturalmente mais vulneráveis à infecção pelo vírus pelo fato de esses sintomas estarem associados a alterações na resposta imunológica, assim como pelas dificuldades de suporte social e autocuidado que essa população poderia apresentar (35).

2.4 O papel da Telemedicina e a exclusão digital

Nas últimas décadas, conhecimentos relacionados a tecnologia de informação e comunicação vêm sendo envolvidos nos cuidados em saúde a vários níveis, como prevenção, diagnóstico, tratamento, monitoramento ou educação da saúde (36).

No contexto da pandemia, a Telemedicina foi encarada como uma forma essencial para acessar e auxiliar essa população. Em relação ao uso da

tecnologia e dos meios digitais nos idosos, é importante referir que os idosos podem experimentar uma “defasagem” individual, estrutural ou cultural em relação às mudanças tecnológicas, sendo importante educá-los e treiná-los primeiro para seu uso, pressupondo que eles podem ser capazes de aprender a usar novas tecnologias. Esse fenômeno, denominado “grey digital divide”, é influenciado não só pelo acesso, mas também por fatores como habilidades digitais/tecnológicas, oportunidades e suporte social (37).

Ensaio clínico controlado e randomizado prévios mostraram que intervenções baseadas em TCC, pessoalmente ou por outro meio, são efetivas no alívio de sintomas depressivos, ansiosos e na sensação de solidão nos adultos (38) (39). Além disso, teleintervenções como programas *online* ou chamadas telefônicas para aqueles que têm menos acesso a recursos digitais parecem ser uma boa forma de mensurar, monitorar e tratar os sintomas apresentados (40). Assim, o telefone parece ser um bom sistema alternativo de providenciar tratamento a este grupo de pessoas, especialmente porque podem estar menos confortáveis com soluções/meios virtuais, ou preferem não usar vídeo (41).

3. JUSTIFICATIVA

É evidente o crescente envelhecimento da população brasileira, fenômeno já comum em vários países. A depressão e ansiedade são muito frequentes em idosos por motivos biológicos, econômicos, psicossociais,... As medidas de tentativa de resposta à pandemia de COVID-19, fez com que estes se tornassem ainda mais vulneráveis a desfechos associados à solidão e isolamento. Tendo isso em conta, além do “grey digital divide”, faz-se necessário acessar, avaliar os possíveis sintomas e auxiliar essa faixa etária da forma mais factível e acessível para eles, inclusive por meio da aplicação de teleintervenções psicoterápicas breves e adequadas às demandas desta população, com vista a minimizar os impactos na sua saúde mental durante e após a pandemia. Ademais, há uma escassez de estudos que envolvem intervenções virtuais em idosos, principalmente no contexto da pandemia, reforçando a relevância de explorar o assunto.

4. OBJETIVOS

4.1 Objetivo Geral

Desenvolver, avaliar e comparar a efetividade de duas teleintervenções psicoterápicas, uma psicoeducacional e outra com técnicas cognitivo-comportamentais, no manejo de sintomas depressivos e/ou ansiosos relacionados com o enfrentamento da pandemia de COVID-19, manifestados por idosos.

4.2 Objetivos específicos

- Rastrear sentimentos de solidão, sintomas depressivos e/ou ansiosos, além de possíveis situações de risco (em saúde mental) nesta população, decorrentes da pandemia
- Desenvolver uma teleintervenção cognitivo-comportamental padronizada para sintomas depressivos e ansiosos nos idosos relativos ao enfrentamento da pandemia de COVID-19
- Desenvolver uma teleintervenção psicoeducacional para sintomas depressivos e ansiosos nos idosos relativos ao enfrentamento da pandemia de COVID-19
- Aplicar as intervenções e avaliar seus efeitos nos sintomas e queixas apresentados
- Avaliar se há superioridade de alguma das intervenções
- Avaliar grau de satisfação dos participantes
- Identificar possíveis limitações e/ou lacunas, com intuito de fomentar novas pesquisas

5. HIPÓTESE

Nossa hipótese é que intervenções por telemedicina serão eficazes na redução de sintomas ansiosos e depressivos manifestados por idosos no enfrentamento da pandemia de COVID-19; e que a intervenção com base na TCC por telefone será superior nesse sentido.

6. ARTIGO

Será submetido ao *International Journal of Geriatric Psychiatry*, de Fator de Impacto de 4.

Tele psychotherapies for depressive and anxiety symptoms in older adults during the COVID-19 pandemic: a randomized clinical trial.

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KEY POINTS

- Telephone-delivered interventions supported older people's mental health during the COVID-19 pandemic.
- Results showed no difference in effectiveness between two tele psychotherapies (cognitive-behavioral therapy *versus* psychoeducation), regarding depressive and anxiety symptoms, as well as loneliness.
- Tele psychotherapies can potentially be very useful to access older adults who live alone, with some physical limitation and/or in remote areas.
- It is important to recognize and minimize the “grey digital divide”.

ABSTRACT

Background: Older people were vulnerable to depressive and anxiety symptoms during the coronavirus disease 2019 (COVID-19) pandemic. Telemedicine has already shown a positive effect on these symptoms, although few trials were carried out during that period.

Objective: To evaluate the effectiveness of cognitive-behavioral and psychoeducational tele interventions on depressive and/or anxiety symptoms and

feelings of loneliness in community-dwelling older adults facing the COVID-19 pandemic.

Methods: Participants (n=45) with mild to moderate depression and/or anxiety were randomized to cognitive-behavioral therapy (CBT) or psychoeducation delivered for 4 weeks by previously trained therapists. Geriatric Depression Scale (GDS), Geriatric Anxiety Inventory (GAI) and the Three-Item Loneliness Scale were applied in the baseline and 2 months after the interventions. All clinical evaluations and both psychotherapies were made by telephone. The Generalized Estimating Equations (GEE) was used to evaluate the outcomes and dropouts were handled with intention-to-treat (ITT) analysis.

Results: Symptoms of depression, anxiety and loneliness were significantly lower after tele CBT and tele psychoeducation (GDS: $p < 0.001$, GAI: $p < 0.001$, loneliness: $p = 0.003$). However, there was no significant time-by-group interaction in relation to the type of intervention for any outcome. The mean difference between GDS pre and post-intervention was -2.52 (IC95%: -3.55; -1.49; $p < 0.001$; $d = 0.72$). The mean difference between GAI pre and post-intervention was -4.24 (IC95%: -5.70; -2.79; $p < 0.001$; $d = 0.85$) and the mean difference between the Three-Item Loneliness Scale pre and post-intervention was -0.91 (IC95%: -1.48; -0.34; $p = 0.002$; $d = 0.47$).

Conclusions: Brief psychotherapies delivered by telephone were equally effective for depressive and anxiety symptoms in older adults facing COVID-19 pandemic, with moderate to strong size effects. More research is needed to solidify the clinical evidence base of telephone-delivered psychotherapies in older adults.

Keywords: Older adults; Mental health; COVID-19; Telemedicine; Psychoeducation; Cognitive behavioral therapy; Randomized controlled trial.

1. INTRODUCTION

Depressive and anxiety symptoms are prevalent in later life and frequently comorbid, but often under-identified and, therefore, undertreated (Drayer et al., 2005; Mackenzie et al., 2011). They are associated with impaired quality of life, loss of functionality, increased mortality and make older adults less likely to seek help (Katon et al., 2005; Scott et al., 2013). In fact, the search for mental health services by older people is almost twice as low as that of younger adults (Mackenzie et al., 2012) and elders are less likely to be referred for psychological interventions, and more likely to be prescribed antidepressants than people of working age (Walters et al., 2018).

Psychotherapy is the first-line treatment of mild-moderate anxiety and depressive symptoms in the elderly (Aggarwal et al., 2017; Kok and Reynolds, 2017). Antidepressants are an important treatment option too, however the incidence of adverse events tends to be higher than in younger adults, as well as drug interactions due to polypharmacy (Kok and Reynolds, 2017). Besides, many elderly people prefer psychotherapy over the use of medication for the treatment

of anxiety (Mohlman, 2012). Evidence for efficacy is more robust for cognitive behavioral therapy (CBT), problem-solving therapy and interpersonal psychotherapy in mild-moderate depression in older adults (Baba et al., 2022; Werson et al., 2022).

Older adults are particularly vulnerable to outcomes associated with social isolation (Read et al., 2020; Santini et al., 2020) and older age was associated with greater risk of mortality in patients with COVID-19 infection (Li et al., 2020). For different reasons, increases in stress levels were considerably higher among older adults at the beginning of COVID-19 pandemic (Zhao et al., 2020). Personal losses, concerns about the virus and its repercussions, social distancing, and the scenario of an uncertain future were associated with increasing mental health problems, especially emotional loneliness. Consequently, it was suggested that the most effective interventions to the well-being among older people could be related to quality of social contacts (Van Tilburg et al., 2021). Self-perceived uselessness among older adults is negatively associated with subsequent successful aging (Gu et al., 2016) and self-perceptions of negative aging are related to higher risk of death, functional impairment and poorer functions of cognition and self-care (Gruenewald et al., 2009; Stewart et al., 2012).

On the other hand, the COVID-19 physical distancing measures stimulated a widespread use of telemedicine, delivered by telephone or web-based (Carrillo De Albornoz et al., 2022). Still, older adults have less familiarity and more difficulties in using technology — known as “grey digital divide” —, which can be influenced by unequal access and factors such as having or not digital/technological skills, opportunities and social support (Mubarak and Suomi, 2022; Seifert, 2020). Many may feel less comfortable with virtual solutions/media, or prefer not to use video (Flint et al., 2020; Gilbody et al., 2021). Only three trials have focused on the effectiveness of telemedicine for depressive and anxiety symptoms in older adults during the COVID-19 pandemic (Shapira et al., 2021; Ying et al., 2021; Gilbody et al., 2021), using CBT delivered by Internet (Shapira et al., 2021; Ying et al., 2021) or by telephone (Gilbody et al., 2021). Shapira and colleagues (Shapira et al., 2021) evaluated the effects of a short-term digital CBT and mindfulness intervention on reducing loneliness and depression and increasing social support among community-dwelling older adults, compared to a wait list group. An improvement of depression was maintained at one-month follow-up with tele CBT. The other study (Ying et al., 2021), in a single trial design, showed effectiveness of an Internet-based Cognitive Behavioral Therapy in reducing psychological distress in older adults without cognitive impairments living in nursing homes. Moreover, a pilot randomized controlled trial (Gilbody et al., 2021) compared usual primary care to usual care plus a brief telephone-delivered intervention based on behavioral activation (BA) in older adults with 2 or more long-term conditions recruited from primary care. Remote BA was feasibly delivered and attenuated the psychological impacts of COVID-19 isolation in older adults who presented depressive symptoms.

Considering the vulnerability to anxiety and depressive symptoms in the elderly, the role of telemedicine during the COVID-19 pandemic and the small number of studies on the subject available throughout this period, we evaluated the effectiveness of cognitive-behavioral and psychoeducational tele interventions in the management of depressive and/or anxiety symptoms in community-dwelling older adults coping with COVID-19. It was also evaluated whether there was a difference in effectiveness between those tele

psychotherapies. We hypothesized that telephone-delivered CBT would be more effective than tele psychoeducation.

2. METHODS

2.1 Study design

This single-blind randomized controlled trial (RCT) compared the effectiveness of two telephone-delivered psychotherapies in older adults facing the COVID-19 pandemic. The main outcomes were reduction of depressive and anxiety symptoms and the secondary outcomes were reduction of loneliness and treatment satisfaction.

2.2 Participants and recruitment

Participants were elderly people living in a Southern Brazilian city. They were recruited from April to October of 2021, after a media advertisement in the community about a help program by telephone for older adults who were presenting depressive and/or anxiety symptoms facing the COVID-19 pandemic. They were instructed to do a free-call to verify the fulfillment of inclusion criteria.

The inclusion criteria were: a) age ≥ 60 years; b) positive screening for mild to moderate depression and/or anxiety; c) depressive and/or anxiety symptoms related to coping with COVID-19 pandemic. The exclusion criteria were: a) severe depression and/or anxiety; b) suicide risk; d) psychotic and/or manic symptoms; e) positive screening for alcohol abuse or other psychoactive substance (except tobacco); f) positive screening for major cognitive impairment; h) hearing impairment; i) starting the use and/or change in any psychotropic medication dosage in the last 2 months; j) current participation in any kind of psychotherapy. The ascertainment of inclusion or exclusion criteria was made by telephone.

The screening interview included sociodemographic data, a question about whether the presenting symptoms were mainly related to coping with the pandemic, the Generalized Anxiety Inventory – short form (GAI-SF) (Byrne and Pachana, 2011), the Patient Health Questionnaire (PHQ-9) (Kroenke et al., 2001), a screening question on the use of psychoactive substances, the Mini-Mental State Examination (MMSE) telephone version (Camozzato et al., 2011), and clinical questions about suicide risk and psychotic or manic symptoms based on MINI (Mini International Neuropsychiatric Interview, Brazilian version 5.0.0) (Amorim, 2000). Those participants who scored ≥ 3 on GAI-SF, 5 to 14 on PHQ-9, >15 on telephone MMSE and did not report psychotic and/or manic symptoms, suicide risk and abuse of psychoactive substances (other than tobacco) were included. This interview was carried out by previously trained Medicine and Psychology students who were blind to the random allocation for each arm of treatment. Study data were collected and managed using REDCap (*Research Electronic Data Capture*) tools. The random allocation was made using a permuted block randomization sequence generated by one member of the research team. Those subjects who were excluded due to severe symptoms were contacted by psychiatrists or psychiatry residents of our team, and referred for further assistance.

The outcome measurement scales were applied in the baseline (after the inclusion in the study) and 2 months after the intervention, excepting for the participant impression about the treatment which was applied only post-intervention. All outcome measures were also telephone-based and they were

applied by researchers blinded to the treatment received. This study was approved by the Research Ethics Committee of Federal University of Health Sciences of Porto Alegre (CAAE-Brazil: 36684920.2.0000.5345) and informed consent was obtained by telephone from all participants and, subsequently, sent by mail.

2.3. Measures

We used the following instruments to measure the outcomes:

- a) Geriatric Depression Scale (GDS), Brazilian Portuguese version: a 15-item short-form scale using “Yes/No” response options for the assessment of depression among older adults (Almeida and Almeida, 1999);
- b) Geriatric Anxiety Inventory (GAI), Brazilian Portuguese version: twenty “Agree/Disagree” items designed to assess typical common anxiety symptoms in the elderly (Massena et al., 2015);
- c) Three-Item Loneliness Scale (Kuznier et al., 2016), Brazilian Portuguese version: a short loneliness scale that assesses perceptions related to lack of companionship, social exclusion and social isolation;
- d) Satisfaction with the treatment was assessed post-interventions using two questions with scores varying from 0 (minimum) to 10 (maximum): “How much did you improve with the treatment?” and “How much would you recommend this treatment?”.

2.4 Intervention

The two tele psychotherapies included four weekly sessions of 45 minutes each. Researchers who applied the interventions were psychiatrists, psychiatry residents and psychologists. They went through a brief training program, which consisted of studying the protocols, meetings with the senior psychiatrists to solve any possible doubts about the instructions, and fulfilling a questionnaire to ascertain their understanding about the content of the interventions. The protocols were built by two senior psychiatrists with expertise in geriatric psychiatry and CBT, respectively, and by a psychiatry resident. A detailed description/script of all sessions with examples of each intervention was made to guide the psychotherapists. Table 1 presents the general content and structure of each session.

Insert Table 1

2.5 Statistical analyses

The Kolmogorov-Smirnov test was used to verify the distribution of variables. Descriptive data were presented as frequency and median plus interquartile range (P25 - P75). Comparison of demographic and clinical baseline data between groups allocated to tele CBT or tele psychoeducation was performed by bivariate Chi-square analysis, Fisher's Exact Test and Mann-Whitney Test for independent samples. The same tests were applied to compare baseline data from individuals who completed the trial and those who dropped

out. The Generalized Estimating Equations (GEE) model with unstructured correlation matrix was used to evaluate the outcomes of depression, anxiety and loneliness. The main effects of group, time and group*time interactions were calculated. The results were shown as mean and 95% confidence interval (CI). Cohen's d was used to measure the effect size. Dropouts were analyzed using the intention-to-treat (ITT) principle. The Mann-Whitney Test was used to compare satisfaction with the treatment between both interventions, and to assess to what extent participants would recommend it. All analyses were conducted using SPSS version 25.0 and the alpha significance level was 0.05.

3. RESULTS

A total of 118 older adults called in the period from April to October 2021 and 45 met the inclusion criteria and were selected for the study. Of these 45, 22 were randomly allocated to the CBT intervention arm and 23 to the psychoeducation intervention arm. A study flow chart is shown in Figure 1.

Insert Figure 1

No significant differences were found between the two groups of intervention regarding sociodemographic data and baseline symptoms severity, as shown in Table 2.

Insert Table 2

As seen in Figure 1, eight participants dropped out during the trial. There was no difference between the number of dropped out who were randomized for tele CBT (N=3) and those who were randomly assigned for tele psychoeducation (N=5), $p=0.699$ (Chi-square association test). Demographic data and baseline symptoms were not different between individuals who completed the trial and those who dropped out (see Table 3).

Insert Table 3

Using ITT analysis with the GEE model, we found a significant improvement in the severity of depression/anxiety symptoms and feelings of loneliness over time in both groups. However, there was no significant time-by-group interaction regarding intervention type for any outcome (see Table 4). The mean difference between GDS pre and post-intervention was -2.52 (IC95%: -3.55 ; -1.49 ; $p < 0.001$; $d=0.72$). The mean difference between GAI pre and post-intervention was -4.24 (IC95%: -5.70 ; -2.79 ; $p < 0,001$; $d=0.85$) and the mean

difference between the Three-Item Loneliness Scale pre and post-intervention was -0.91 (IC95%: -1.48; -0.34; $p = 0.002$; $d = 0.47$).

Insert Table 4

Nineteen participants from the tele CBT group and seventeen from the tele psychoeducation arm answered the questions on satisfaction with treatment. There was no significant difference ($U = 128$; $p = 0.300$) of satisfaction with treatment between older adults who received tele CBT (median, IQR= 9 [8; 10]) or those who received tele psychoeducation (median, IQR= 8 [7;9]). All participants of both groups recommended the treatment (median, IQR= 10 [10; 10]) $U = 187.5$; $p = 0.415$).

4. DISCUSSION

This study showed no difference in effectiveness between two tele psychotherapies and this might be explained by several reasons, which deserve further research. Firstly, we can hypothesize that in the face of a strong stressful event, support strategies might be considered sufficient, which would be very advantageous in helping those affected, as they do not require professionals to undergo specific and time-consuming training to apply them, making them more feasible and easier to replicate. Additionally, the slight but significant superiority of CBT over other treatments for depression in adults has recently been called into question, as this difference is small and does not remain significant in most sensitivity analyses (Cuijpers et al., 2023, 2020). In turn, the idea that the CBT protocol would be superior for addressing the sense of usefulness in this population was refuted. It seems that non-specific elements, such as patient aspects and patient-therapist relationship, are the main mediators of effectiveness. In fact, the factors that contribute to the outcome of psychotherapy are: patient variables and context (40%); factors of therapeutic relationship (30%); placebo effect, hope and positive expectation (15%) and just 15% depend on technical factors (Lambert and Barley, 2001). As an example, a program of empathetic telephone calls to reduce loneliness in homebound adults who expressed need for food during the pandemic was effective, with callers having only 2 hours of training, no degree requirement, and genuinely wanting to serve the population (Kahlon et al., 2021). Moreover, educating patients about their disorder or functioning is one of the basic principles of cognitive and behavioral therapy (Wright et al., 2017). So, there may have been some technical similarities between the protocols and that may have overridden their differences.

As expected, this RCT showed that both telephone-delivered psychotherapies produced a significant improvement in depressive and anxiety symptoms in community-dwelling older adults facing the COVID-19 pandemic. The reduction in loneliness observed in our study was also predicted and is in line with previous results during pandemic showing a positive effect of remote interactive programs on feelings of loneliness in older adults living in long-term care institutions (Yang et al., 2023), as well as in community (Liu et al., 2023). We should highlight the magnitude of symptomatic improvement with these tele psychotherapies, with large ($d = 0.85$) and medium ($d = 0.72$) effect sizes on

reduction of anxiety and depressive symptoms, respectively (Sullivan and Feinn, 2012). Both therapies were highly recommended by the participants and high subjective ratings of treatment satisfaction were reported, with no significant difference between both groups, which may represent a predictor of good compliance, reinforcing the role of tele interventions in elderly people. Nonetheless, we are not sure whether the “regression to the mean” fallacy occurred and if the participants would have had the same improvement without the interventions. In any case, this only reinforces the importance of non-pharmacological measures as initial strategies in these cases, rather than the uncontrolled prescription of medications.

The evaluation of tele psychotherapies for older people with depressive/anxiety symptoms during the COVID-19 pandemic was relevant, since we found a small number of trials with the same goals. Of the two controlled studies found, one compared tele CBT with wait list (Shapira et al., 2021), while the other used an active control (Gilbody et al., 2021). We opted for an active control group, considering the pandemic scenario and the assumed vulnerability of the elderly in this context. Second, we chose telephone-delivered interventions taking into account the “grey digital divide” (Mubarak and Suomi, 2022; Seifert, 2020) and the preference that the elderly have for telephone contact over technology-enabled video calling (Gilbody et al., 2021). It is important to know that they can benefit from telephone interventions in situations where access to care or in-person psychotherapy may be restricted, or there may be a need for physical isolation or even limitations to move/travel, for example.

This study has some limitations. Our findings are limited by small sample size and brief follow-up period. Despite our dropout rate, we carried out an ITT analysis and the baseline demographic and clinical characteristics from subjects who completed the trial and those who dropped out did not significantly differ. Surely, additional research should recruit a larger sample. In addition, we should point out that the demand for care was lower than we expected, given that it is a vulnerable population and the interventions were free and accessible. We attribute this to a possible insecurity of the elderly and their families regarding telephone approaches, since there is, unfortunately, a cultural context of attempts to “deceive” this population. Also, we must emphasize that almost half of the excluded subjects (34 of 73) assessed for eligibility, were excluded because of suicidal risk, psychotic symptoms, severe depression/anxiety, alcohol abuse and telecommunication issues. We can hypothesize that the fact that Brazil is a developing country may have contributed to this, taking into account the chances of more precarious medical assistance during the COVID-19 pandemic.

This was an effectiveness study, which suggests that its findings are relevant to psychotherapies practiced under real clinical settings. Moreover, we should mention that we evaluated the effect of these treatments in elderly people with mild to moderate depression and/or anxiety facing an unexpected stressful situation, and who had interest and motivation to seek help. Therefore, we are not sure whether these tele psychotherapies would be effective (or even if they would have adherence), or if one would be superior to the other, in more severe conditions or in patients unable to recognize the need for help.

5. CONCLUSIONS

The COVID-19 pandemic highlighted the possibility of remote healthcare and our study concluded that this can be effective. Tele psychotherapies for older

adults may be attractive for situations other than the pandemic, where loneliness and social distancing can occur. The reduction of the “grey digital divide” should be encouraged.

With these findings in mind, clinicians can be encouraged to consider short-term psychotherapies for their older patients with mental disorders, and thus reduce the medication burden in this group.

Future research can further confirm our findings and look for ways to facilitate access to psychotherapy and telehealth services in older adults, and it would be interesting to include longer follow-up periods.

CONFLICT OF INTEREST STATEMENT

Nothing to declare.

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REFERENCES

- Aggarwal, R., Kunik, M., Asghar-Ali, A., 2017. Anxiety in Later Life. *FOC* 15, 157–161. <https://doi.org/10.1176/appi.focus.20160045>
- Almeida, O.P., Almeida, S.A., 1999. Confiabilidade da versão brasileira da Escala de Depressão em Geriatria (GDS) versão reduzida. *Arq. Neuro-Psiquiatr.* 57, 421–426. <https://doi.org/10.1590/S0004-282X1999000300013>
- Amorim, P., 2000. Mini International Neuropsychiatric Interview (MINI): validação de entrevista breve para diagnóstico de transtornos mentais. *Rev. Bras. Psiquiatr.* 22, 106–115. <https://doi.org/10.1590/S1516-44462000000300003>
- Baba, H., Kito, S., Nukariya, K., Takeshima, M., Fujise, N., Iga, J., Oshibuchi, H., Kawano, M., Kimura, M., Mizukami, K., Mimura, M., Committee for Treatment Guidelines of Mood Disorders, Japanese Society of Mood Disorders, 2022. Guidelines for diagnosis and treatment of depression in older adults: A report from the Japanese Society of mood disorders. *Psychiatry Clin Neurosci* 76, 222–234. <https://doi.org/10.1111/pcn.13349>
- Byrne, G.J., Pachana, N.A., 2011. Development and validation of a short form of the Geriatric Anxiety Inventory – the GAI-SF. *Int. Psychogeriatr.* 23, 125–131. <https://doi.org/10.1017/S1041610210001237>
- Camozzato, A.L., Kochhann, R., Godinho, C., Costa, A., Chaves, M.L., 2011. Validation of a telephone screening test for Alzheimer’s disease. *Aging, Neuropsychology, and Cognition* 18, 180–194. <https://doi.org/10.1080/13825585.2010.521814>
- Carrillo De Albornoz, S., Sia, K.-L., Harris, A., 2022. The effectiveness of teleconsultations in primary care: systematic review. *Family Practice* 39, 168–182. <https://doi.org/10.1093/fampra/cmab077>
- Cuijpers, P., Miguel, C., Harrer, M., Plessen, C.Y., Ciharova, M., Ebert, D., Karyotaki, E., 2023. Cognitive behavior therapy vs. control conditions,

- other psychotherapies, pharmacotherapies and combined treatment for depression: a comprehensive meta-analysis including 409 trials with 52,702 patients. *World Psychiatry* 22, 105–115. <https://doi.org/10.1002/wps.21069>
- Cuijpers, P., Noma, H., Karyotaki, E., Vinkers, C.H., Cipriani, A., Furukawa, T.A., 2020. A network meta-analysis of the effects of psychotherapies, pharmacotherapies and their combination in the treatment of adult depression. *World Psychiatry* 19, 92–107. <https://doi.org/10.1002/wps.20701>
- Drayer, R.A., Mulsant, B.H., Lenze, E.J., Rollman, B.L., Dew, M.A., Kelleher, K., Karp, J.F., Begley, A., Schulberg, H.C., Reynolds, C.F., 2005. Somatic symptoms of depression in elderly patients with medical comorbidities. *Int. J. Geriatr. Psychiatry* 20, 973–982. <https://doi.org/10.1002/gps.1389>
- Flint, A.J., Bingham, K.S., Iaboni, A., 2020. Effect of COVID-19 on the mental health care of older people in Canada. *Int. Psychogeriatr.* 32, 1113–1116. <https://doi.org/10.1017/S1041610220000708>
- Gilbody, S., Littlewood, E., McMillan, D., Chew-Graham, C.A., Bailey, D., Gascoyne, S., Sloan, C., Burke, L., Coventry, P., Crosland, S., Fairhurst, C., Henry, A., Hewitt, C., Joshi, K., Ryde, E., Shearsmith, L., Traviss-Turner, G., Woodhouse, R., Clegg, A., Gentry, T., Hill, A.J., Lovell, K., Dexter Smith, S., Webster, J., Ekers, D., 2021. Behavioural activation to prevent depression and loneliness among socially isolated older people with long-term conditions: The BASIL COVID-19 pilot randomised controlled trial. *PLoS Med* 18, e1003779. <https://doi.org/10.1371/journal.pmed.1003779>
- Gruenewald, T.L., Karlamangla, A.S., Greendale, G.A., Singer, B.H., Seeman, T.E., 2009. Increased Mortality Risk in Older Adults With Persistently Low or Declining Feelings of Usefulness to Others. *J Aging Health* 21, 398–425. <https://doi.org/10.1177/0898264308329023>
- Gu, D., Brown, B.L., Qiu, L., 2016. Self-perceived uselessness is associated with lower likelihood of successful aging among older adults in China. *BMC Geriatr* 16, 172. <https://doi.org/10.1186/s12877-016-0348-5>
- Kahlon, M.K., Aksan, N., Aubrey, R., Clark, N., Cowley-Morillo, M., Jacobs, E.A., Mundhenk, R., Sebastian, K.R., Tomlinson, S., 2021. Effect of Layperson-Delivered, Empathy-Focused Program of Telephone Calls on Loneliness, Depression, and Anxiety Among Adults During the COVID-19 Pandemic: A Randomized Clinical Trial. *JAMA Psychiatry* 78, 616. <https://doi.org/10.1001/jamapsychiatry.2021.0113>
- Katon, W.J., Rutter, C., Simon, G., Lin, E.H.B., Ludman, E., Ciechanowski, P., Kinder, L., Young, B., Von Korff, M., 2005. The Association of Comorbid Depression With Mortality in Patients With Type 2 Diabetes. *Diabetes Care* 28, 2668–2672. <https://doi.org/10.2337/diacare.28.11.2668>
- Kok, R.M., Reynolds, C.F., 2017. Management of Depression in Older Adults: A Review. *JAMA* 317, 2114. <https://doi.org/10.1001/jama.2017.5706>
- Kroenke, K., Spitzer, R.L., Williams, J.B.W., 2001. The PHQ-9: Validity of a brief depression severity measure. *J Gen Intern Med* 16, 606–613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
- Kuznier, T.P., Oliveira, F., Mata, L.R.F., Chianca, T.C.M., 2016. Translation and cross-cultural adaptation of UCLA Loneliness Scale - (version 3) for the

- elderly in Brazil. *REME - Rev Min Enferm.*; 20:e950. <https://doi.org/10.5935/1415-2762.20160019>)
- Lambert, M.J., Barley, D.E., 2001. Research summary on the therapeutic relationship and psychotherapy outcome. *Psychotherapy: Theory, Research, Practice, Training* 38, 357–361. <https://doi.org/10.1037/0033-3204.38.4.357>
- Li, Q., Guan, X., Wu, P., Wang, X., Zhou, L., Tong, Y., Ren, R., Leung, K.S.M., Lau, E.H.Y., Wong, J.Y., Xing, X., Xiang, N., Wu, Y., Li, C., Chen, Q., Li, D., Liu, T., Zhao, J., Liu, M., Tu, W., Chen, C., Jin, L., Yang, R., Wang, Q., Zhou, S., Wang, R., Liu, H., Luo, Y., Liu, Y., Shao, G., Li, H., Tao, Z., Yang, Y., Deng, Z., Liu, B., Ma, Z., Zhang, Y., Shi, G., Lam, T.T.Y., Wu, J.T., Gao, G.F., Cowling, B.J., Yang, B., Leung, G.M., Feng, Z., 2020. Early Transmission Dynamics in Wuhan, China, of Novel Coronavirus–Infected Pneumonia. *N Engl J Med* 382, 1199–1207. <https://doi.org/10.1056/NEJMoa2001316>
- Liu, C.-W., Hsieh, P.-L., Yang, S.-Y., Lin, Y.-L., Wang, J.-Y., 2023. The effectiveness of facilitator-led remote interactive intervention for loneliness, quality of life, and social support among seniors in communities during the COVID-19 pandemic: a randomized controlled experiment. *Psychology & Health* 1–14. <https://doi.org/10.1080/08870446.2023.2261024>
- Mackenzie, C.S., Reynolds, K., Cairney, J., Streiner, D.L., Sareen, J., 2012. Disorder-specific mental health service use for mood and anxiety disorders: associations with age, sex, and psychiatric comorbidity: Disorder-Specific Mental Health. *Depress Anxiety* 29, 234–242. <https://doi.org/10.1002/da.20911>
- Mackenzie, C.S., Reynolds, K., Chou, K.-L., Pagura, J., Sareen, J., 2011. Prevalence and Correlates of Generalized Anxiety Disorder in a National Sample of Older Adults. *The American Journal of Geriatric Psychiatry* 19, 305–315. <https://doi.org/10.1097/JGP.0b013e318202bc62>
- Massena, P.N., De Araújo, N.B., Pachana, N., Laks, J., De Pádua, A.C., 2015. Validation of the Brazilian Portuguese Version of Geriatric Anxiety Inventory – GAI-BR. *Int. Psychogeriatr.* 27, 1113–1119. <https://doi.org/10.1017/S1041610214001021>
- Mohlman, J., 2012. A community based survey of older adults' preferences for treatment of anxiety. *Psychology and Aging* 27, 1182–1190. <https://doi.org/10.1037/a0023126>
- Mubarak, F., Suomi, R., 2022. Elderly Forgotten? Digital Exclusion in the Information Age and the Rising Grey Digital Divide. *INQUIRY* 59, 004695802210962. <https://doi.org/10.1177/00469580221096272>
- Read, S., Comas-Herrera, A., Grundy, E., 2020. Social Isolation and Memory Decline in Later-life. *The Journals of Gerontology: Series B* 75, 367–376. <https://doi.org/10.1093/geronb/gbz152>
- Santini, Z.I., Jose, P.E., York Cornwell, E., Koyanagi, A., Nielsen, L., Hinrichsen, C., Meilstrup, C., Madsen, K.R., Koushede, V., 2020. Social disconnectedness, perceived isolation, and symptoms of depression and anxiety among older Americans (NSHAP): a longitudinal mediation analysis. *The Lancet Public Health* 5, e62–e70. [https://doi.org/10.1016/S2468-2667\(19\)30230-0](https://doi.org/10.1016/S2468-2667(19)30230-0)

- Scott, K.M., De Jonge, P., Alonso, J., Viana, M.C., Liu, Z., O'Neill, S., Aguilar-Gaxiola, S., Bruffaerts, R., Caldas-de-Almeida, J.M., Stein, D.J., De Girolamo, G., Florescu, S.E., Hu, C., Taib, N.I., Lépine, J.-P., Levinson, D., Matschinger, H., Medina-Mora, M.E., Piazza, M., Posada-Villa, J.A., Uda, H., Wojtyniak, B.J., Lim, C.C.W., Kessler, R.C., 2013. Associations between DSM-IV mental disorders and subsequent heart disease onset: Beyond depression. *International Journal of Cardiology* 168, 5293–5299. <https://doi.org/10.1016/j.ijcard.2013.08.012>
- Seifert, A., 2020. The Digital Exclusion of Older Adults during the COVID-19 Pandemic. *Journal of Gerontological Social Work* 63, 674–676. <https://doi.org/10.1080/01634372.2020.1764687>
- Shapira, S., Cohn-Schwartz, E., Yeshua-Katz, D., Aharonson-Daniel, L., Clarfield, A.M., Sarid, O., 2021. Teaching and Practicing Cognitive-Behavioral and Mindfulness Skills in a Web-Based Platform among Older Adults through the COVID-19 Pandemic: A Pilot Randomized Controlled Trial. *IJERPH* 18, 10563. <https://doi.org/10.3390/ijerph182010563>
- Stewart, T.L., Chipperfield, J.G., Perry, R.P., Weiner, B., 2012. Attributing illness to 'old age:' Consequences of a self-directed stereotype for health and mortality. *Psychology & Health* 27, 881–897. <https://doi.org/10.1080/08870446.2011.630735>
- Sullivan, G.M., Feinn, R., 2012. Using Effect Size—or Why the *P* Value Is Not Enough. *Journal of Graduate Medical Education* 4, 279–282. <https://doi.org/10.4300/JGME-D-12-00156.1>
- Van Tilburg, T.G., Steinmetz, S., Stolte, E., Van Der Roest, H., De Vries, D.H., 2021. Loneliness and Mental Health During the COVID-19 Pandemic: A Study Among Dutch Older Adults. *The Journals of Gerontology: Series B* 76, e249–e255. <https://doi.org/10.1093/geronb/gbaa111>
- Walters, K., Falcaro, M., Freemantle, N., King, M., Ben-Shlomo, Y., 2018. Sociodemographic inequalities in the management of depression in adults aged 55 and over: an analysis of English primary care data. *Psychol. Med.* 48, 1504–1513. <https://doi.org/10.1017/S0033291717003014>
- Werson, A.D., Meiser-Stedman, R., Laidlaw, K., 2022. A meta-analysis of CBT efficacy for depression comparing adults and older adults. *Journal of Affective Disorders* 319, 189–201. <https://doi.org/10.1016/j.jad.2022.09.020>
- Wright, J.H., Brown, G.K., Thase, M.E., Basco, M.R., 2017. Learning cognitive-behavior therapy: an illustrated guide, Second edition. ed, Core competencies in psychotherapy. American Psychiatric Association Publishing, Arlington, VA.
- Yang, S., Yang, C., Lee, Y., Hsieh, P., Lin, Y., 2023. Investigating the effectiveness of online interactive courses on loneliness and quality of life of older adults in the community during the COVID -19 pandemic: A pilot study and a randomized controlled trial. *Geriatrics Gerontology Int* 23, 91–97. <https://doi.org/10.1111/ggi.14526>
- Ying, Y., Ji, Y., Kong, F., Chen, Q., Lv, Y., Hou, Y., Zhu, L., Miao, P., Yu, L., Li, L., Kuang, W., Jiang, L., Zhu, X., Liu, X., Xu, L., Mi, Y., Lou, Z., Ruan, L., 2021. Internet-based cognitive behavioral therapy for psychological distress in older adults without cognitive impairment living in nursing homes during the COVID-19 pandemic: A feasibility study. *Internet Interventions* 26, 100461. <https://doi.org/10.1016/j.invent.2021.100461>

Zhao, S.Z., Wong, J.Y.H., Luk, T.T., Wai, A.K.C., Lam, T.H., Wang, M.P., 2020. Mental health crisis under COVID-19 pandemic in Hong Kong, China. *International Journal of Infectious Diseases* 100, 431–433. <https://doi.org/10.1016/j.ijid.2020.09.030>

Table 1. General structure and sessional content.

WEEK	TELE PSYCHOEDUCATION	TELE CBT
1	Empathetic listening to validate and normalize the impact of the pandemic in patients' life. Identification of the patient's main complaints.	Identification of patient's main complaints using empathetic listening. Overview of the treatment plan. Apply sleep hygiene measures if pertinent. Homework: practice 2 to 3 sleep hygiene measures.
2	Differentiation "pathological VS non-pathological". Check their own strategies (if so) to deal with symptoms. Validate and reinforce the use of appropriate strategies and provide guidance on maladaptive strategies.	Feedback on last session's homework. Learn behavioral activation with a survey of personalized strategies to be implemented. Homework: apply one or more behavioral activation tasks every day.
3	Educate about general measures adopted against COVID-19 and healthy habits (physical activity, eating, sleep) that help maintain mental health. Encourage the participants to maintain their healthy coping strategies and reduce unhealthy coping strategies.	Feedback on last session's homework. Identify improvement in mood with behavioral activation strategies. Cognitive and behavioral approaches to improve sense of usefulness and coping with social distancing. Homework: apply strategies in order to increase the participant's sense of usefulness and connection with other people.
4	Identify gains during the therapy. Refer to psychiatric care if significant symptoms persist or worsen. Inform that there will be a follow-up contact after 2 months.	Feedback on homework. Introduce other strategies for self-regulation, such as diaphragmatic breathing technique. Recognize strategies that provide positive gains. Reinforcement session. Refer to further assistance if significant symptoms persist or worsen. Follow-up contact after 2 months.

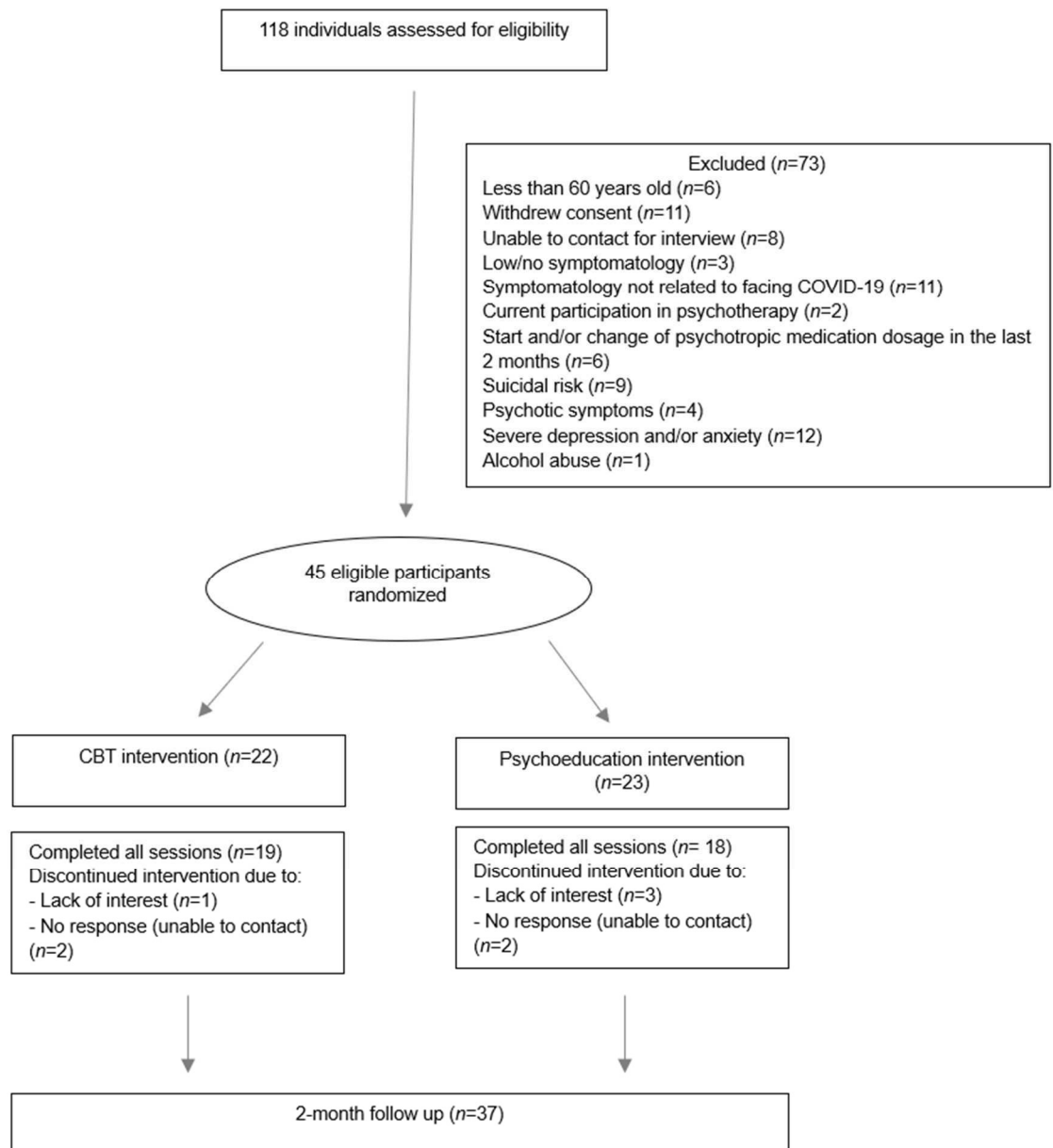


Figure 1. Study flow chart.

Table 2. Sociodemographic data and baseline symptoms s+everity: descriptive and comparative analyses.

	Tele CBT group N=22	Tele psychoeducation group N=23	Total N=45	χ^2 /U	p- value
Female sex (N, %) [#]	18 (81.8)	18 (78.3)	36 (80)	χ^2 =0.09	0.766
Age (median, IQR)*	71 (69; 77)	69 (61; 76)	70 (67; 76)	U=168.5	0.054
Years of education (median, IQR)*	10.5 (7; 12)	11 (6; 14)	11 (7; 12)	U=246	0.873
Marital status (N, %) [‡]				χ^2 =1.27	0.737
single	5 (22.7)	3 (13)	8 (17.8)		
married	6 (27.3)	9 (39.1)	15 (33.3)		
divorced	5 (22.7)	4 (17.4)	9 (20)		
widowed	6 (27.3)	7 (30.4)	13 (28.9)		
GDS (median, IQR)*	5.5 (5; 9)	7 (5; 9)	7 (5; 9)	U=231.5	0.622
GAI (median, IQR)*	12.5 (8; 15)	14 (7; 16)	13 (8; 15)	U=219	0.438
Three-Item Loneliness Scale (median, IQR)*	6.5 (5; 7)	6 (4; 7)	6 (5; 7)	U=237	0.713

[#]Fisher's Exact Test, *Mann-Whitney Test, [‡]Chi-square Test

GDS: Geriatric Depression Scale, GAI: Geriatric Anxiety Scale, IQR: interquartile range

Table 3. Comparison of sociodemographic data and baseline symptoms between individuals who completed the trial and those who dropped out.

	Participants who completed the trial N=37	Dropped out N=8	χ^2 /U	p- value
Female sex (N, %) [#]	29 (78.4)	7 (87.5)	$\chi^2 = 0.01$	1.000
Age (median, IQR)*	70 (67; 76)	75 (66.5; 82)	U = 190	0.223
Years of education (median, IQR)*	12 (7; 14)	9 (5.5; 11)	U = 93.5	0.107
Marital status (N, %) [‡]			$\chi^2 = 6.92$	0.074
single	8 (21.6)	0 (0)		
married	14 (37.8)	1 (12.5)		
divorced	7 (18.9)	2 (25.0)		
widowed	8 (21.6)	5 (62.5)		
GDS (median, IQR)*	6 (5; 9)	7 (4; 8)	U = 131	0.631
GAI (median, IQR)*	12 (8; 15)	15 (10; 16)	U = 185	0.285
Three-Item Loneliness Scale (median, IQR)*	6 (5; 7)	6.5 (4.5; 9)	U = 176.5	0.405

[#]Fisher's Exact Test, *Mann-Whitney Test, [‡]Chi-square Test

GDS: Geriatric Depression Scale, GAI: Geriatric Anxiety Scale, IQR: interquartile range

Table 4. Results of tele CBT and tele psychoeducation groups for symptom severity and loneliness (GEE).

	Before intervention (mean, 95 CI%)	After intervention (mean, 95 CI%)	p-value time	p-value interaction (time*group)
GDS				
tele CBT group	6.68 (5.50; 7.87)	3.91 (2.63; 5.19)	<0.001	0.636
tele psychoeducation group	6.83 (5.66; 7.99)	4.55 (2.69; 6.41)		
time	6.75 (5.92; 7.59)	4.23 (3.1; 5.36)		
GAI				
tele CBT group	11.36 (9.63; 13.09)	7.95 (5.74; 10.16)	<0.001	0.264
tele psychoeducation group	11.78 (9.72; 13.84)	6.71 (4.13; 9.29)		
time	11.57 (10.23; 12.92)	7.33 (5.63; 9.03)		
Three-Item Loneliness Scale				
tele CBT group	6.09 (5.29; 6.89)	5.12 (4.15; 6.01)	0.002	0.846
tele psychoeducation group	5.96 (5.24; 6.67)	5.10 (4.49; 5.71)		
time	6.02 (5.49; 6.56)	5.11 (4.54; 5.69)		

GDS: Geriatric Depression Scale, GAI: Geriatric Anxiety Scale

7. CONCLUSÃO

A pandemia evidenciou a necessidade e a possibilidade de acessar e auxiliar, de forma remota, certos grupos mais vulneráveis. Este Ensaio Clínico Randomizado concluiu que, de fato, psicoterapias realizadas por telefone resultaram na melhora significativa dos sintomas depressivos e ansiosos, em idosos residentes na comunidade, que enfrentavam a pandemia de COVID-19. As reduções da ansiedade e dos sintomas depressivos através das duas telepsicoterapias apresentaram tamanhos de efeito grande e médio, respectivamente. Ambas foram também efetivas na melhora dos sentimentos de solidão e altamente recomendadas pelos participantes. Além disso, foram relatados elevados níveis de satisfação com as intervenções, o que pode representar um preditor de boa adesão, reforçando o papel das teleintervenções nesta população.

Este estudo não mostrou diferença significativa na efetividade entre as duas telepsicoterapias, ou seja, não houve superioridade de uma em relação à outra. Uma das razões que pode explicar esse resultado é o fato de, aparentemente, elementos inespecíficos, como aspectos do paciente e a relação paciente-terapeuta, serem os principais mediadores de eficácia, tendo os fatores técnicos um peso muito menor nessa questão.

É de ressaltar que avaliámos o efeito das teleintervenções em idosos com depressão e/ou ansiedade leve a moderada, perante um evento totalmente inesperado e estressante, que tinham interesse e motivação para procurar ajuda. Portanto, não temos certeza se as telepsicoterapias seriam efetivas (ou até mesmo se haveria adesão) em quadros mais graves ou em pacientes incapazes de reconhecerem, por si, a necessidade de ajuda.

De qualquer forma, consideramos que as telepsicoterapias para idosos podem ser interessantes em outras situações além da pandemia, onde isolamento e sentimentos de solidão possam ocorrer. Ademais, perante os achados expostos, profissionais de saúde podem ser encorajados a considerar psicoterapias de curta duração para os seus pacientes mais velhos, reduzindo o risco de polifarmácia neste grupo.

Como perspectivas futuras, a redução do “grey digital divide” (exclusão digital) deve ser incentivada, através de uma progressiva interação e familiaridade desta população com recursos tecnológicos.

Pesquisas futuras poderão confirmar nossos achados e investigar formas de facilitar o acesso à psicoterapia e aos serviços de telessaúde mental em idosos. Além disso, seria interessante indagar resultados a longo prazo, com períodos de *follow-up* mais longos.

8. REFERÊNCIAS

1. Mackenzie CS, Reynolds K, Chou KL, Pagura J, Sareen J. Prevalence and correlates of generalized anxiety disorder in a national sample of older adults. *American Journal of Geriatric Psychiatry*. 2011; 19(4):305–15.
2. Lenze EJ, Wetherell JL. A lifespan view of anxiety disorders. *Dialogues Clin Neurosci*. 2011;13(4):381-399.
3. Wetherell JL., Gatz M., Pedersen NL. A longitudinal analysis of anxiety and depressive symptoms. *Psychol Aging*. 2001; 16:187–195.
4. Andreescu, C., Varon, D. New Research on Anxiety Disorders in the Elderly and an Update on Evidence-Based Treatments. *Curr Psychiatry*. 2015; Rep 17, 53.
5. Lin EHB, Rutter CM, Katon W, Heckbert SR, Ciechanowski P, Oliver MM, et al. Depression and advanced complications of diabetes: a prospective cohort study. *Diabetes Care*. 2010, 33(2):264–9.
6. Katon WJ, Rutter C, Simon G, et al. The association of comorbid depression with mortality in patients with type 2 diabetes. *Diabetes Care*. 2005;28(11):2668-2672.
7. Taylor WD. Clinical practice. Depression in the elderly. *N Engl J Med* [Internet]. 2014 set 25;371(13):1228–36.
8. Kok RM, Reynolds CF. Management of depression in older adults: A review. Vol. 317, *JAMA - Journal of the American Medical Association*. American Medical Association; 2017. p. 2114–22.
9. Aggarwal R, Kunik M, Asghar-Ali A. Anxiety in Later Life. *Focus (Madison)*. 2017;15(2):157–61.
10. Coupland C, Dhiman P, Morriss R, Arthur A, Barton G, Hippisley-Cox J. Antidepressant use and risk of adverse outcomes in older people: Population based cohort study. *BMJ (Online)*. 2011 ago 13;343(7819).
11. Haimi M. The tragic paradoxical effect of telemedicine on healthcare disparities- a time for redemption: a narrative review. *BMC Med Inform Decis Mak*. 2023;23(1):95.
12. Brignell M, Wootton R, Gray L. The application of telemedicine to geriatric medicine. Vol. 36, *Age and Ageing*. 2007; p. 369–74.
13. Patel SY, Mehrotra A, Huskamp HA, Uscher-Pines L, Ganguli I, Barnett ML. Trends in outpatient care delivery and telemedicine during the COVID-19 pandemic in the US. *JAMA Intern Med*. 2021;181(3):388-391.
14. O'Reilly R, Bishop J, Maddox K, Hutchinson L, Fisman M, Takhar J. Is telepsychiatry equivalent to face-to-face psychiatry? Results from a randomized controlled equivalence trial. *Psychiatr Serv*, 2007; 58(6):836–43.
15. Gentry MT, Lapid MI, Rummans TA. Geriatric Telepsychiatry: Systematic Review and Policy Considerations. *American Journal of Geriatric Psychiatry*. 2018;27(2):109–27.

16. Tábuas Completas de Mortalidade | IBGE, 2020. Available from: <https://ibge.gov.br/estatisticas/sociais/populacao/9126-tabuas-completas-de-mortalidade.html?=&t=resultados>
17. World Health Organization. United Nations Decade of Healthy Ageing. 2020.
18. Fiske A, Wetherell JL, Gatz M. Depression in Older adults Annu Rev Clin Psychol. 2009;5:363-89
19. Wolitzky-Taylor KB, Castriotta N, Lenze EJ, Stanley MA, Craske MG. Anxiety disorders in older adults: a comprehensive review. *Depress Anxiety*. 2010;27(2):190–211
20. Lenze EJ, Karp JF, Mulsant BH, et al. Somatic symptoms in late-life anxiety: treatment issues. *J Geriatr Psychiatry Neurol* 2005;18:89-96
21. Mohlman J. A community based survey of older adults' preferences for treatment of anxiety. *Psychol Aging*. 2012;27(4):1182-1190.
22. Mackenzie CS, Reynolds K, Cairney J, Streiner DL, Sareen J. Disorder-specific mental health service use for mood and anxiety disorders: associations with age, sex, and psychiatric comorbidity. *Depress Anxiety*. 2012;29(3):234-242
23. Walters K, Falcaro M, Freemantle N, King M, Ben-Shlomo Y. Sociodemographic inequalities in the management of depression in adults aged 55 and over: an analysis of English primary care data. *Psychol Med*. 2018;48(9):1504-1513.
24. Baba H, Kito S, Nukariya K, et al. Guidelines for diagnosis and treatment of depression in older adults: A report from the Japanese Society of mood disorders. *Psychiatry Clin Neurosci*. 2022;76(6):222-234.
25. Werson AD, Meiser-Stedman R, Laidlaw K. A meta-analysis of CBT efficacy for depression comparing adults and older adults. *J Affect Disord*. 2022;319:189-201.
26. Li Q, Guan X, Wu P, et al. Early Transmission Dynamics in Wuhan, China, of Novel Coronavirus-Infected Pneumonia. *N Engl J Med*. 2020;382(13):1199-1207
27. Stolz E., Mayerl H., Freidl W. The Impact of COVID-19 Restriction Measures on Loneliness among Older Adults in Austria. *Eur. J. Public Health*. 2021; 31:44–49
28. Brooks SK, Webster RK, Smith LE, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet* 2020;395:912-920
29. Chen Y, Feeley TH. Social support, social strain, loneliness, and well-being among older adults: an analysis of the Health and Retirement Study. *J Soc Pers Relat* 2014; 31: 141–61.
30. Tragantzopoulou P., Giannouli V. Social Isolation and Loneliness in Old Age: Exploring Their Role in Mental and Physical Health. *Psychiatr. Psychiatr*. 2021;32:59–66.

31. Holt-Lunstad J, Smith TB, Baker M, et al. Loneliness and social isolation as risk factors for mortality: a meta-analytic review. *Perspect Psychol Sci* 2015;10:227–37.
32. Stewart TL, Chipperfield JG, Perry RP, Weiner B. Attributing illness to 'old age:' consequences of a self-directed stereotype for health and mortality. *Psychol Health*. 2012;27(8):881-897.
33. Gruenewald TL, Karlamangla AS, Greendale GA, Singer BH, Seeman TE. Increased mortality risk in older adults with persistently low or declining feelings of usefulness to others. *J Aging Health*. 2009;21(2):398-425.
34. Gu, D., Brown, B.L. & Qiu, L. Self-perceived uselessness is associated with lower likelihood of successful aging among older adults in China. *BMC Geriatr*. 2016; 16:172
35. Yao H, Chen J-H, Xu Y-F. Patients with mental health disorders in the COVID-19 epidemic. *Lancet Psychiatry* 2020; 7: e21
36. Kvedar J, Coye MJ, Everett W. Connected health: a review of technologies and strategies to improve patient care with telemedicine and telehealth. *Health Aff (Millwood)*. 2014;33(2):194–9.
37. Seifert A. The Digital Exclusion of Older Adults during the COVID-19 Pandemic. *J Gerontol Soc Work*. 2020;63(6-7):674-676.
38. Bessaha ML, Sabbath EL, et al. A systematic review of loneliness interventions among non-elderly adults. *Clin Soc Work J*. 2019
39. Käll A, Jägholm S, et al. Internet-based cognitive behavior therapy for loneliness: a pilot randomized controlled trial. *Behav Ther*. 2019
40. Greer B, Robotham D, Simblett S, Curtis H, Griffiths H, Wykes T. Digital exclusion among mental health service users: qualitative investigation. *J Med Internet Res* 2019; 21: e11696.
41. Flint AJ, Bingham KS, Iaboni A. Effect of COVID-19 on the Mental Health Care of Older People in Canada. *Int Psychogeriatr*. 2020 Apr 24:1-10

9. ANEXOS

9.1 ANEXO A – Parecer de aprovação do Comitê de Ética da UFCSPA

PARECER CONSUBSTANCIADO DO CEP

DADOS DO PROJETO DE PESQUISA

Título da Pesquisa: Teleintervenções psicológicas para idosos enfrentando a pandemia COVID-19.

Pesquisador: Analuiza Camozzato de Padua

Área Temática:

Versão: 2

CAAE: 36684920.2.0000.5345

Instituição Proponente: Universidade Federal de Ciências da Saúde de Porto Alegre

Patrocinador Principal: Financiamento Próprio
Capes Coordenação Aperf Pessoal Nível Superior

DADOS DO PARECER

Número do Parecer: 4.277.580

Apresentação do Projeto:

Segundo projeto submetido pelos pesquisadores na plataforma brasil, O presente projeto objetiva desenvolver e analisar a efetividade de uma teleintervenção psicoterápica cognitivo-comportamental breve e padronizada para detectar e minimizar o impacto psicossocial nos idosos que a pandemia pelo novo coronavírus está causando. Tem como finalidade diminuir seus sintomas depressivos e/ou ansiosos, assim como avaliar e reduzir a sua sensação de solidão. Este projeto é um ensaio clínico randomizado controlado, cujo principal objetivo será avaliar a efetividade de uma teleintervenção cognitivo-comportamental breve via remota (telefone) comparada a uma teleintervenção psicoeducacional (grupo controle ativo) para reduzir sintomas depressivos e ansiosos apresentados por idosos atualmente enfrentado a pandemia. O projeto está inserido dentro de um projeto maior da UFCSPA, contemplado pelo edital Telemedicina 1666049P, aprovado pela CAPES ("Tele intervenções para detectar e minimizar o impacto emocional trans/pós o confinamento em pandemias").

Objetivo da Pesquisa:

Objetivo

Objetivo geral:

- Desenvolver e avaliar a efetividade de teleintervenção para detectar e minimizar o impacto psicossocial nos idosos durante e após a pandemia do coronavírus (COVID 19)

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Objetivos específicos:

- 1) Definir qual o melhor meio de acessar digitalmente esta população (telefone convencional)
- 2) Avaliar quais são as demandas prioritárias desta população em relação à pandemia e ao decorrente distanciamento social durante e após a pandemia
- 3) Rastrear sentimentos de solidão, sintomas depressivos, ansiosos, insônia, e risco de suicídio nesta população decorrente da pandemia e de suas implicações durante e após a pandemia
- 4) Determinar qual apoio existe para os idosos e suas famílias, compreender fatores psicológicos, estratégias de enfrentamento, fatores fisiológicos (exemplo: estado nutricional, acuidade auditiva e visual) e estruturais (rotinas diárias) pré-existentes que podem ser fatores de risco ou proteção durante e após a pandemia.
- 5) Desenvolver uma teleintervenção cognitivo-comportamental padronizada para sintomas depressivos e ansiosos nos idosos relativos ao enfrentamento da pandemia
- 6) Comparar a efetividade desta teleintervenção cognitivo-comportamental padronizada a uma teleintervenção controle

Avaliação dos Riscos e Benefícios:

Conforme informado no TCLE: Os possíveis riscos ou desconfortos decorrentes da participação na pesquisa são sintomas de leve ansiedade temporária nas sessões de terapia e o tempo para responder os questionários e para realizar a psicoterapia.

Os possíveis benefícios decorrentes da participação na pesquisa, segundo os pesquisadores são: “a redução dos sintomas de ansiedade e de depressão, assim como da sensação de solidão. Além disso, o(a) sr(a) estará contribuindo para a compreensão de como os idosos se sentem e se comportam em situações estressantes como uma pandemia e qual dos tratamentos aplicados é mais eficiente em reduzir o sofrimento emocional com esta situação. Você estará contribuindo para a produção de conhecimento científico que poderá ajudar a melhorar o tratamento de outros pacientes com essas mesmas doenças”.

Comentários e Considerações sobre a Pesquisa:

Nesta versão o TCLE foi ajustado e contempla a garantia de indenização diante de eventuais danos decorrentes da pesquisa e a garantia de que os dados obtidos a partir dos participantes da pesquisa não poderão ser usados para outros fins além dos previstos no protocolo de pesquisa em questão e no TCLE. Ademais, na versão anterior do projeto era informado que o TCLE seria enviado

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pelo correio e assim deveria ser devolvido, o que implicaria um possível risco dos participantes, compostos por um público de idosos, terem que sair de casa e um eventual custo pelo envio do TCLE. Nesta versão, os pesquisadores modificam este fluxo e o TCLE, conforme os pesquisadores "será lido em voz alta, pelo pesquisador, através do telefone e, caso o participante aceite em fazer parte da pesquisa, o pesquisador assinará o termo como testemunha e aval do consentimento falado e será enviada uma cópia deste termo assinado pelo correio aos idosos para que eles fiquem com uma cópia impressa do que ouviram e consentiram ao telefone". Sugerimos retirar a palavra "testemunha" da descrição do fluxo de envio do TCLE por que é passível de confusão com termos legais e de conflito de interesse em relação ao pesquisador testemunhar o aval do participante, além disso, sugerimos rever que o que será enviado aos participantes não se trata de uma cópia, mas de uma via. Ademais, sugerimos como forma complementar de registro do consentimento, gravar a ligação, conforme preconiza a resolução pq na 510.

Considerações sobre os Termos de apresentação obrigatória:

Vide comentários sobre a pesquisa.

Conclusões ou Pendências e Lista de Inadequações:

Vide comentários sobre a pesquisa.

Considerações Finais a critério do CEP:

De acordo com o parecer do Relator.

Este parecer foi elaborado baseado nos documentos abaixo relacionados:

Tipo Documento	Arquivo	Postagem	Autor	Situação
Informações Básicas do Projeto	PB_INFORMAÇÕES_BÁSICAS_DO_PROJETO_1592393.pdf	08/09/2020 20:22:25		Aceito
TCLE / Termos de Assentimento / Justificativa de Ausência	TCLE.pdf	08/09/2020 20:21:42	Analuiza Camozzato de Padua	Aceito
Projeto Detalhado / Brochura Investigador	PROJETOdetalhado.pdf	08/09/2020 20:20:48	Analuiza Camozzato de Padua	Aceito
Outros	termocompromissoentregaderelatorio.pdf	12/08/2020 16:29:23	Analuiza Camozzato de Padua	Aceito
Folha de Rosto	Camoz.pdf	16/07/2020 18:27:34	Analuiza Camozzato de Padua	Aceito

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Continuação do Parecer: 4.277.580

Situação do Parecer:

Aprovado

Necessita Apreciação da CONEP:

Não

PORTO ALEGRE, 15 de Setembro de 2020

Assinado por:

Fernanda Bordignon Nunes
(Coordenador(a))

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9.2 ANEXO B – Normas de submissão ao *International Journal of Geriatric Psychiatry*

AUTHOR GUIDELINES

Updated June 2023

International Journal of Geriatric Psychiatry is published in online-only format from 2022. This is a positive move towards reducing the environmental impact caused by the production and distribution of printed journal copies and will allow the journal to invest in further innovation, digital development and sustainability measures. Published articles will continue to be disseminated quickly through the journal's broad network of indexing services, including Web of Science, MEDLINE and Scopus. Articles will also continue to be discoverable through popular search engines such as Google.

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A note on language

The journal seeks to ensure that the language used by authors is in line with the preferences of the groups of individuals who the papers seek to describe and serve by research. We have consulted with national and international groups focusing on the voice of these with lived experience of older people's mental health in general and dementia specifically, including family carers of people with dementia. We advise that positive and inclusive language is used, driven by respect for the person with the condition and their role as research participant.

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1. Please use "person with dementia" or "people with dementia" to describe people with dementia, do not abbreviate this to PwD/PWD, our lived experience advisors have informed us that they do not support the use of such abbreviation.
2. Please use "person with dementia" or "people with dementia" rather than "person living with dementia" or "people living with dementia", our lived experience advisors have advised us that this creates confusion in whether it refers to people with dementia alone, or people with dementia and their family carers, co-resident or not.
3. Please use "participant" rather than subject to describe participants in the research described.
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Editorials/ Commentaries	Evidence-based opinion pieces involving areas of broad interest and invited commentaries.	4500 limit	No	One continuous section with content-specific headings if needed.

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** We also welcome qualitative research papers that further understanding of the perspectives, experiences and unmet needs of older people with mental health problems and their supporters. Articles should be methodologically rigorous and have clear applications for treatment, services and support. These types of research papers have a higher word limit of 6,000 words.

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Appendix

Species Names

Upon its first use in the title, abstract, and text, the common name of a species should be followed by the scientific name (genus, species, and authority) in parentheses. For well-known species, however, scientific names may be omitted from article titles. If no common name exists in English, only the scientific name should be used.

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Sequence variants should be described in the text and tables using both DNA and protein designations whenever appropriate. Sequence variant nomenclature must follow the current HGVS guidelines; see varnomen.hgvs.org, where examples of acceptable nomenclature are provided.

Sequence Data

Nucleotide sequence data can be submitted in electronic form to any of the three major collaborative databases: DDBJ, EMBL, or GenBank. It is only necessary to submit to one database as data are exchanged between DDBJ, EMBL, and GenBank on a daily basis. The suggested wording for referring to accession-number information is: 'These sequence data have been submitted to the DDBJ/EMBL/GenBank databases under accession number U12345'. Addresses are as follows:

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