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Hypnosis Intervention for Sleep Disturbances in Individuals with Mild Cognitive Impairment: A Randomized Pilot Study

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ABSTRACT

Poor sleep quality is highly prevalent among individuals with mild cognitive impairment (MCI). Further, poor sleep quality is associated with reduced quality of life, increased stress response, memory impairments, and progression to dementia among individuals with MCI. Pharmacological treatments for sleep have mixed efficacy and can lead to dependency. Therefore, alternatives to pharmacological treatments for improving sleep among individuals with MCI are needed. The present study reports on the feasibility of a non-pharmacological self-administered hypnosis intervention focused on sleep quality in adults with MCI. It was hypothesized that the hypnosis intervention program would be feasible and have acceptable levels of adherence to daily hypnosis practice. A two-armed randomized controlled pilot trial was conducted using a sample of 21 adults with MCI. Eligible participants were randomly assigned to listen to either hypnosis audio recordings or sham hypnosis recordings for five weeks. Program feasibility, program adherence, pain intensity, stress, and sleep quality were measured using a daily home practice log, questionnaires, and wrist actigraphy. The results found mid or higher levels of treatment satisfaction, ease of use, and perceived effectiveness at one-week follow-up, with participants in the hypnosis arm reporting greater perceived benefit. Adherence to assigned audio recordings and meetings were likewise within acceptable margins in both groups. No intervention-related adverse events were reported in either treatment condition. Significant improvements in sleep quality, sleep duration, and daytime sleepiness were found for the hypnosis intervention. The results of this study can be used to inform future research on the effects of hypnosis on sleep quality in adults with MCI.

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Introduction

Mild cognitive impairment (MCI) is frequently a transitional stage between normal cognitive functioning and dementia. It is characterized by measurable deficits in one

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or more of cognitive domains such as memory, language, and executive functioning with preservation of activities of daily living (Winblad et al., 2004). In the US, approximately 54 million are above the age of 65 and prevalence rates MCI ranges between 16% and 20% for individuals above the age of 60 (Roberts & Knopman, 2013). This indicates that there may be between 8.6 and 10.8 million adults in the US currently suffering from MCI.

Poor sleep quality is a common problem among individuals with MCI often compromising quality of life and may increase the risk of conversion to dementia (Westerberg et al., 2012). While normal aging is already associated with worsening sleep quality (Mander et al., 2013), individuals with MCI have been shown to experience even greater deficits in sleep quality and duration (Westerberg et al., 2012).

Poor sleep quality has been associated with reduced quality of life and increased stress (Mrug et al., 2016; Tan et al., 2018). Furthermore, chronic sleep difficulties may lead to impairments in immune functioning, increased risk for cardiovascular disease, cortical loss, and the progression of MCI to dementia (Miller & Cappuccio, 2007; Sanchez-Espinosa et al., 2014; Tan et al., 2019). Among individuals with MCI, diminished sleep quality has been specifically linked to increased memory impairments (Westerberg et al., 2012). Ultimately, poor sleep quality seen in individuals with MCI has the potential to worsen disease progression and negatively impact quality of life and health.

Pharmacological interventions for sleep quality in individuals with MCI may have significant side effects, and non-pharmacological interventions have been demonstrated to have limited effectiveness (Blackman et al., 2021). From a pharmacological standpoint, individuals with MCI and dementia may be prescribed antipsychotics, antidepressants, sedatives, and melatonin (Burke et al., 2018; Salami et al., 2011). However, the use of many of these treatments for improving the sleep quality of individuals with cognitive impairments show mixed efficacy. Furthermore, some of these pharmacological interventions, especially antipsychotics and benzodiazepines, are associated with aversive side effects such as sedation and worsening cognitive abilities.

Of the non-pharmacological interventions used to improve sleep quality in individuals with MCI, multi-modal intervention programs (e.g., light therapy, electrotherapy, cognitive behavioral therapy, mindfulness, acupressure) are among the most promising (O'Caoimh et al., 2019). However, these interventions have only been found to improve sleep efficiency and not necessarily improvements with other sleep or non-sleep outcomes. The current state of the research indicates that there is still a pressing need for alternative interventions to improve the sleep quality in individuals with MCI.

Hypnosis is a promising, but under-studied, non-pharmacological intervention to improve poor sleep quality among individuals with MCI (Wofford et al., 2023). Hypnosis is defined as "a state of consciousness involving focused attention and reduced peripheral awareness characterized by an enhanced capacity for response to suggestion" (Elkins et al., 2015, p. 6). There is strong evidence that hypnosis interventions can improve sleep quality, by increasing duration and deepening sleep, in a variety of clinical and non-clinical samples (Chamine et al., 2018). A recent review of seven related studies concluded that hypnosis is feasible for individuals with dementia (Wawrziczny et al., 2021). The authors concluded that dementia patients are hypnotizable and that hypnosis may provide positive clinical benefits (Wawrziczny et al., 2021). Also, improved sleep quality achieved through

a hypnosis intervention has been shown to be associated with enhanced cognitive functioning (Cordi et al., 2015).

In a recent study, Elkins et al. (2021) examined the differential effects of a manualized hypnosis intervention for sleep improvement in post-menopausal women, between conditions varying in dose (3 vs. 5 sessions) and delivery (in-person vs. remote). Satisfaction with the treatment did not differ significantly between groups, indicating an at-home program using audio recordings for treatment is feasible. Sleep quality, as measured by the Pittsburgh Sleep Quality Index (PSQI), improved significantly from baseline to post-intervention across all groups. Interestingly, the group receiving 5 phone call sessions demonstrated a clinically significant and large effect on sleep quality at the end of the 5-week intervention and at follow-up two weeks later. These results indicate the feasibility and potential efficacy of a self-administered hypnosis program to improve sleep with no apparent inferiority to in-person sessions. This is further supported by the findings from a recent study which demonstrated the feasibility and safety of a self-administered hypnosis intervention for improving sleep quality in a sample of college-aged students (Snyder et al., 2023). However, to our knowledge, there are no existing studies of the effect of hypnosis addressing sleep disturbances in individuals with MCI. Therefore, assessing a hypnosis intervention for this population is important and innovative.

The aim of the present study was to determine the feasibility of a self-administered hypnosis intervention compared to a sham hypnosis control among individuals with MCI and sleep disturbances. Our primary aims were to evaluate the feasibility of accrual, adherence with daily practice with audio recordings (hypnosis and sham hypnosis), and program satisfaction. Also, adverse events were evaluated. Secondary outcomes were feasibility of measures including: Pittsburgh Sleep Quality Index (PSQI), wrist actigraphy, daily sleep diaries, and Epworth Sleepiness Scale. While the study was not powered to determine efficacy, we hypothesized that the self-administered program would have a stronger effect on objective and subjective measures of sleep quality compared to the sham hypnosis control group.

Method

Participants

We recruited a sample of 21 individuals with mild cognitive impairment who suffer from poor sleep. Participants were recruited with newspaper advertisements and mailed postcards in Waco, Texas and the surrounding areas. To meet inclusion criteria, participants were required to have a subjective memory complaint (score ≥ 3 on the Memory Complaint Scale; MCS; Vale et al., 2012); as well as demonstrate a measurable cognitive deficits as assessed by a score of between 7 and 18 on the telephone administered Montreal Cognitive Assessment (MoCA-blind version 8) (Nasreddine et al., 2005); and have a sleep quality score of 5 or lower on the Pittsburgh Sleep Quality Index (PSQI). Individuals who used medication to help them sleep were eligible to participate if they reported being on a stable regimen for at least 2 months. Participants were excluded if they had severe or unstable medical or psychiatric illness; current use of hypnosis for any other condition; an inability

to speak or understand English; or were currently using medication for sleep for less than 2 months.

Procedures

This was a two-arm, randomized clinical trial to determine the feasibility of a hypnosis intervention to improve sleep in individuals with mild cognitive impairment. Following screening, eligible participants were randomized and enrolled into one of two study groups, a self-administered hypnosis group (treatment) or sham white noise hypnosis group (control). Participants completed study measures at baseline and follow-up. The study was 7 weeks long and organized as one week for baseline data collection, five weeks of active treatment, and one week for follow-up data collection (see Figure 1 for participant flow chart). All participants were given guidance on the use of hypnosis and recordings for at-home practice throughout the study. Participants had the choice to complete study materials by using physical copies or by submitting the materials electronically. The study was registered on ClinicalTrials.gov before data collection started (registry number: NCT05215717).

Intervention

Self-Administered Hypnosis for Sleep

Regardless of condition, the intervention lasted five weeks. Participants in the self-administered hypnosis intervention received weekly phone calls and were instructed to listen to a hypnosis audio recording once each day, preferably as they were preparing for sleep or while lying in bed to go to sleep at night. The phone calls included review of adherence, asking about any adverse events, answering questions, and encouragement to listen to the audio recordings at bed-time each day. The self-administered hypnosis audio recording was approximately 15 minutes in length and included suggestions for focus of attention, relaxation, and mental imagery for deeper sleep (Elkins et al., 2021). Participants in the treatment group were given a new recording each week. The recordings for the self-administered hypnosis group featured a guided induction (focus of attention and relaxation) as well as suggestions for progressively deeper sleep with each successive recording.

Sham Hypnosis Control

Participants in the control condition received the same amount of contact time and weekly phone calls. They were provided with a recording that was labeled "White Noise Hypnosis." Those in the sham hypnosis condition were given an audio recording that included suggestions to focus attention and "experience hypnosis "while listening to white noise. The sham hypnosis recording was approximately 15 minutes in length. Participants were asked to listen to the sham hypnosis recording each day, preferably when preparing for sleep or lying in bed with eyes closed to go to sleep at night. As with the self-administered hypnosis group, the phone calls included a review of adherence, asking about any adverse events, answering questions, and encouragement to listen to the audio recordings at bed-time each day. We have used

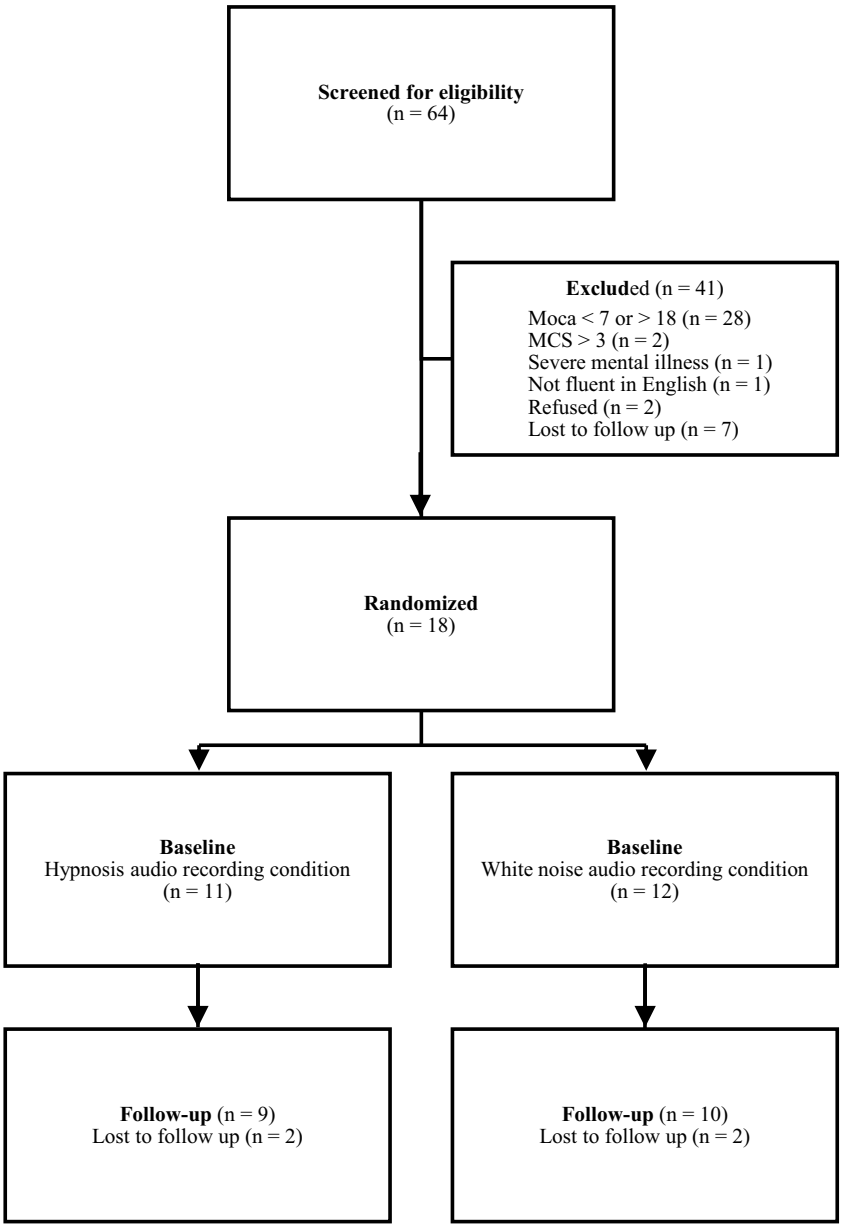

Figure 1. Participant Flowchart
MoCA– Montreal Cognitive Assessment; MCS– Memory Complaint Scale.

a similar sham hypnosis intervention in prior study with post-menopausal women and breast cancer survivors and found it to be credible and acceptable (Barton et al., 2017).

Measures

Primary outcome measures of feasibility included participant dropout rate, prevalence of adverse events, and self-reported ratings of program satisfaction, ease of use, and perceived effectiveness on 10-point numerical rating scales. To measure adherence, participants were asked to complete a home practice form tracking how often they listened to the recording. All primary outcome measures that require participant input were assessed during the follow-up week.

Secondary outcomes were self-report measures and objective measurement of sleep duration measured with a wrist actigraphy. Wrist actigraphy is widely used and considered a well-validated measure of sleep duration (Martin & Hakim, 2011). The wrist actigraphy (Actiwatch 2; Phillips Respironics, Andover, MA) resembles a wristwatch and was worn on the non-dominant wrist. A motion detection device in the watch measured movement. The data is stored in the watch and can be extracted and analyzed with the Phillips Respironics 5 software program. Participants wore the actigraphy device for one week at baseline and for another week at follow-up. Subjective sleep quality was measured with the Pittsburgh Sleep Quality Index (PSQI), a 19-item self-report inventory with 7 subscales measuring sleep quality, sleep efficiency, daytime dysfunction, sleep latency, sleep disturbances, sleep duration, and use of sleep medication. Cronbach's alpha for the PSQI ranges from .70 to .80 (Carpenter & Andrykowski, 1998). A further measure of subjective sleep used for this study are daily sleep diaries. Participants were also asked to keep nightly sleep diaries of time to bed, time to awaken, and total sleep time. Finally, daytime sleepiness was measured with the Epworth Sleepiness Scale (ESS) at baseline and follow-up. The ESS is an 8-item self-report scale that asks participants how likely they are to fall asleep while performing certain activities like watching television or driving. The ESS has been shown to have a Cronbach's alpha of .88 (Johns, 1992).

Data Analysis

Descriptive statistics were used to report demographic data and ratings of feasibility. Study outcomes and demographics at baseline were compared using independent t-tests and chi-squared tests to check for baseline differences between the two treatment groups. Within group changes in outcomes from baseline (Week 0) to endpoint (Week 6) were assessed using paired t-tests. Between group differences in outcomes at endpoint were analyzed using ANCOVAs to control for baseline scores when calculating treatment effect sizes. Effect sizes for between group differences in outcomes at endpoint were analyzed using partial eta squared, which indicated the percent of variance explained by group differences after controlling for baseline scores. Effect sizes for within group changes on variables from baseline to endpoint were assessed using d-statistics. The percentage of participants in each study condition that showed an improvement of 0.5 standard deviation units (SD) or greater was defined as a clinically meaningful change and was calculated for each outcome (Elkins et al., 2013).

Results

Demographics

Of the 64 adults with mild-cognitive impairment screened for eligibility, 23 met the inclusion criteria and were randomized into one of the two arms of the study (Figure 1). The treatment and control arms of the study did not differ significantly in number of dropouts during the study. The mean age of the sample was 71.95 years (SD = 7.80). 54.5% of the sample was male, and 45.5% of the sample was female. The majority of the sample was white (90.9%) while the remainder was Asian, mixed, or other races. Fourteen percent of participants were single, 9.6% were divorced, 23.8% were widowed, and 52.4% were married. Five percent of sample participants reported having less than a high school education, 5.3% reported having finished high school, 21.1% reported having gone to college without completing their degree, and 68.3% of the participants reported having completed a college degree.

Primary Outcomes

Adherence to Daily Practice

In both groups, participants were asked to record their daily at-home self-hypnosis practice using a Hypnosis Practice Log. They were instructed to practice using their assigned recordings once per day. Adherence to self-hypnosis was high across both conditions. The mean number of weekly practices ranged from 7.25 (SD = 2.60) at baseline (Week 0) to 6.00 (SD = 2.56) at endpoint (Week 6) for the treatment group and from 7.82 (SD = 4.87) at baseline to 8.91 (SD = 9.80) at endpoint for the control group.

Program and Treatment Satisfaction

Upon completion of study, participants were asked to rate their overall level of satisfaction with the program and the ease of use of the treatment. The mean satisfaction rating scores were 8.00 (SD = 2.11) and 5.82 (SD = 2.82) in the treatment and control groups, respectively, on a 0-to-10 NRS (0 = *highly dissatisfied*, 10 = *highly satisfied*). The average ease of use rating were 8.60 (SD = 1.84) and 6.91 (SD = 3.11) in the treatment and control conditions on the same NRS.

Additionally, participants were asked to rate the program in terms of subjective sleep improvement on the same 0 (*highly dissatisfied*) to 10 (*highly satisfied*) NRS. On average, participants in the treatment group rated their sleep improvement at 7.40 (SD = 1.65), and participants in the control group rated their sleep improvement at 4.91 (SD = 2.77).

Adverse Events

During each session, adverse events were assessed using participant self-reports. Of the two adverse events reported, none were likely related to the study. These events included a mild ear infection and an allergy-related headache. No medical attention was sought out for either of these events.

Secondary Outcomes

Sleep Quality

The Pittsburgh Sleep Quality Index (PSQI) was administered at baseline and at endpoint to measure changes in sleep quality. Participants in the treatment condition showed statistically significant improvements in sleep quality at endpoint ($t(8) = 6.934$, $p < .001$), whereas those in the control condition did not ($t(9) = 1.450$, $p = .090$). The effect of at home hypnosis treatment was large at endpoint, $d = 2.31$. The percentage of participants in the sample reporting a clinically meaningful improvement in sleep quality (≥0.5 SD) from baseline to endpoint was 81.2% in the treatment condition and 25% in the control condition.

Wrist Actigraph

A significant difference in actigraphy measured sleep duration was found between the treatment and control conditions at endpoint, $F(1,16) = 5.32$, $p = .035$, $p\eta^2 = .25$. That being said, the percentage of participants reporting clinically meaningful improvements in actigraphy measured sleep duration of *SD* of 0.5 or greater was higher in the treatment group, 27.27%, than in the control group, 8.33%.

Daily Sleep Diaries

Feedback from participants indicated difficulty in remembering to complete the diaries in real time and found them burdensome. There was no significant difference between the treatment and control groups in sleep diary duration at endpoint, $F(1,13) = .863$, $p = .370$, $p\eta^2 = .062$.

Daytime Sleepiness

Participants in the control group reported significantly higher daytime sleepiness scores on the Epworth Sleepiness Scale than participants in the treatment group at endpoint, $F(1,18) = 4.891$, $p = .040$, $p\eta^2 = .214$. Daytime sleepiness significantly improved from baseline to endpoint in treatment group, $t(9) = 2.345$, $p = .044$, $d = .742$, but not in the control group, $t(10) = 1.127$, $p = .286$, $d = .340$. The percentage of participants reporting clinically meaningful improvements in daytime sleepiness of *SD* of 0.5 or greater was 41.67% in the control group and 54.55% in the treatment group.

Discussion

The aim of the present study was to evaluate the feasibility of a self-administered hypnosis intervention to improve sleep in individuals with self-reported mild cognitive impairment using a small scale two-armed study design. Participants were randomly assigned to listen to either a prerecorded hypnosis for sleep program or white noise for 15 minutes a day daily for five weeks and keep a hypnosis and sleep diary. It was found that participants from each arm reported good levels of treatment satisfaction, ease of use, and perceived effectiveness at one-week follow-up, with participants in the hypnosis arm reporting higher perceived benefit. Adherence to assigned audio recordings and meetings were likewise very good in both groups. No intervention-related adverse events were reported in either treatment condition.

Although the primary objective of the current study was to assess feasibility, exploratory statistical analyses did find significantly greater improvements in daytime sleepiness in the hypnosis group than in the white noise group. Significantly longer actigraphy measured sleep duration was found in the control group than in the hypnosis group. These statistical findings should be examined with caution as the small size of the current sample limits the meaningfulness of their interpretation.

The results of this study establish feasibility of a randomized trial comparing a hypnosis intervention to a shame hypnosis control. Further, secondary outcomes suggest the hypnosis intervention may significantly improve sleep in individuals with MCI. However, a larger, fully powered clinical trial is needed to determine efficacy. Future studies should also examine hypnotizability to determine if hypnotizability moderates effects from the hypnosis intervention on sleep outcomes.

There are also several observations from the present study that may inform a future clinical trial. First, in the present study the majority of those screened presented with subjective concerns regarding cognitive impairment, however, one of the most common reasons for ineligibility was scores on the MoCA above the cutoff for participation. Secondly, many participants had difficulty remembering to complete sleep diaries in real time and found them burdensome. Future studies should use less burdensome self-reports in addition to wrist actigraphy to measure sleep outcomes. Third, the current one-week follow-up was limited in its ability to detect how changes in sleep duration were maintained. Follow-up periods beyond one week would provide insight into the duration of the intervention's effects.

Given the prevalence of sleep disturbances amongst individuals with mild cognitive impairment, there is a need for effective treatment options. The present study was a first step toward developing such an intervention. Follow-up studies on the use of self-administered hypnosis for sleep for this population can expand on the findings presented here by testing its efficacy compared to other non-pharmacological treatment options using larger samples.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

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Data Availability Statement

The data for this study is available upon request.

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Hypnose-Intervention bei Schlafstörungen bei Personen mit leichten kognitiven Beeinträchtigungen : Eine randomisierte Pilotstudie

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Zusammenfssung: Schlechte Schlafqualität ist bei Personen mit leichten kognitiven Beeinträchtigungen (MCI) weit verbreitet. Darüber hinaus wird eine schlechte Schlafqualität mit einer verminderten Lebensqualität, einer erhöhten Stressreaktion, Gedächtnisstörungen und dem Fortschreiten einer Demenz bei Menschen mit MCI in Verbindung gebracht. Pharmakologische Behandlungen für den Schlaf sind unterschiedlich wirksam und können zu Abhängigkeit führen. Daher werden Alternativen zu pharmakologischen Behandlungen benötigt, um den Schlaf von Menschen mit MCI zu verbessern. Die vorliegende Studie berichtet über die Durchführbarkeit einer nicht-pharmakologischen, selbst verabreichten Hypnoseintervention, die sich auf die Schlafqualität bei Erwachsenen mit MCI konzentriert. Es wurde die Hypothese aufgestellt, dass das Hypnose-Interventionsprogramm durchführbar ist und eine akzeptable Adhärenz für die tägliche Hypnosepraxis aufweist. Es wurde eine zweiarmige, randomisierte, kontrollierte Pilotstudie mit einer Stichprobe von 21 Erwachsenen mit MCI durchgeführt. Die in Frage kommenden Teilnehmer wurden nach dem Zufallsprinzip ausgewählt, um fünf Wochen lang entweder Hypnose-Audioaufnahmen oder Scheinhypnoseaufnahmen zu hören. Die Durchführbarkeit des Programms, die Befolgung des Programms, die Schmerzintensität, der Stress und die Schlafqualität wurden anhand eines täglichen Protokolls zu Hause, von Fragebögen und der Aktigraphie am Handgelenk gemessen. Die Ergebnisse zeigten, dass die Zufriedenheit mit der Behandlung, die Benutzerfreundlichkeit und die wahrgenommene Wirksamkeit bei der einwöchigen Nachuntersuchung im mittleren oder höheren Bereich lagen, wobei die Teilnehmer in der Hypnosegruppe einen größeren Nutzen empfanden. Die Einhaltung der zugewiesenen Audioaufnahmen und Sitzungen lag in beiden Gruppen ebenfalls in einem akzeptablen Rahmen. In beiden Behandlungsgruppen wurden keine interventionsbedingten unerwünschten Ereignisse gemeldet. Die Hypnose-Intervention führte zu einer signifikanten Verbesserung der Schlafqualität, der Schlafdauer und der Tagesschläfrigkeit. Die Ergebnisse dieser Studie können als Grundlage für künftige Forschungen über die Auswirkungen von Hypnose auf die Schlafqualität bei Erwachsenen mit MCI dienen.

Intervention par hypnose pour les troubles du sommeil chez les personnes atteintes d'une déficience cognitive légère : Une étude pilote randomisée

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Résumé: La mauvaise qualité du sommeil est très répandue chez les personnes atteintes de troubles cognitifs légers (MCI). En outre, la mauvaise qualité du sommeil est associée à une réduction de la qualité de vie, à une augmentation de la réponse au stress, à des troubles de la mémoire et à une progression vers la démence chez les personnes atteintes de DCL. Les traitements pharmacologiques du sommeil ont une efficacité mitigée et peuvent entraîner une dépendance. Il est donc nécessaire de trouver des alternatives aux traitements pharmacologiques pour améliorer le sommeil chez les personnes atteintes de DCL. La présente étude rapporte la faisabilité d'une intervention non pharmacologique d'hypnose auto-administrée axée sur la qualité du sommeil chez les adultes atteints de DCL. L'hypothèse était que le programme d'intervention par hypnose serait faisable et aurait des niveaux acceptables d'adhésion à la pratique quotidienne de l'hypnose. Un essai pilote randomisé et contrôlé à deux bras a été mené sur un échantillon de 21 adultes atteints de DCL. Les participants éligibles ont été assignés au hasard à l'écoute d'enregistrements audio d'hypnose ou d'enregistrements d'hypnose fictifs pendant cinq semaines. La faisabilité du programme, l'adhésion au programme, l'intensité de la douleur, le stress et la qualité du sommeil ont été mesurés à l'aide d'un journal quotidien de pratique à domicile, de questionnaires et de l'actigraphie du poignet. Les résultats ont révélé des niveaux moyens ou supérieurs de satisfaction à l'égard du traitement, de facilité

d'utilisation et d'efficacité perçue lors du suivi d'une semaine, les participants du groupe hypnose faisant état d'un bénéfice perçu plus important. L'adhésion aux enregistrements audio et aux réunions était également dans des marges acceptables dans les deux groupes. Aucun événement indésirable lié à l'intervention n'a été signalé dans l'une ou l'autre des conditions de traitement. Des améliorations significatives de la qualité du sommeil, de la durée du sommeil et de la somnolence diurne ont été constatées dans le cadre de l'intervention par hypnose. Les résultats de cette étude peuvent être utilisés pour informer les futures recherches sur les effets de l'hypnose sur la qualité du sommeil chez les adultes atteints de MCI.

Intervención con Hipnosis Para las Alteraciones del Sueño en Individuos con Deterioro Cognitivo Leve : Un Estudio Piloto Aleatorizado

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Resumen: La mala calidad del sueño es altamente prevalente entre los individuos con deterioro cognitivo leve (DCL). Además, la mala calidad del sueño se asocia con una menor calidad de vida, una mayor respuesta al estrés, alteraciones de la memoria y la progresión a la demencia entre las personas con DCL. Los tratamientos farmacológicos del sueño tienen una eficacia desigual y pueden provocar dependencia. Por lo tanto, se necesitan alternativas a los tratamientos farmacológicos para mejorar el sueño de las personas con DCL. El presente estudio informa sobre la viabilidad de una intervención de hipnosis autoadministrada no farmacológica centrada en la calidad del sueño en adultos con DCL. Se hipotetizó que el programa de intervención de hipnosis sería factible y tendría niveles aceptables de adherencia a la práctica diaria de hipnosis. Se realizó un ensayo piloto controlado aleatorio de dos brazos usando una muestra de 21 adultos con DCL. Los participantes elegibles fueron asignados aleatoriamente a escuchar grabaciones de audio de hipnosis o grabaciones simuladas de hipnosis durante cinco semanas. La viabilidad del programa, la adherencia al programa, la intensidad del dolor, el estrés, y la calidad del sueño se midieron usando un registro diario de práctica en casa, cuestionarios, y actigrafía de muñeca. Los resultados hallaron niveles medios o superiores de satisfacción con el tratamiento, facilidad de uso y eficacia percibida en el seguimiento de una semana, y los participantes del brazo de hipnosis informaron de un mayor beneficio percibido. La adherencia a las grabaciones de audio asignadas y a las reuniones se mantuvo igualmente dentro de márgenes aceptables en ambos grupos. No se registraron efectos adversos relacionados con la intervención en ninguno de los dos tratamientos. Se encontraron mejoras significativas en la calidad del sueño, la duración del sueño y la somnolencia diurna para la intervención de hipnosis. Los resultados de este estudio pueden usarse para informar futuras investigaciones sobre los efectos de la hipnosis en la calidad del sueño en adultos con DCL.

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