

Original Research Article

**EFFECTIVENESS OF HYPNOTHERAPY IN INSOMNIA PATIENTS:
SYSTEMATIC LITERATURE REVIEW**

Putu Agus Ariana ¹⁾*, I Made Ady Wirawan ²⁾, Dyah Pradnyaparamita Duarsa²⁾, Cokorda Bagus Jaya Lesmana²⁾

¹⁾ Doctoral Program at Udayana University, ²⁾ Udayana University

* Corresponding Author, E-mail : putuagusariana234@gmail.com

ABSTRACT

Introduction. Insomnia is a sleep disorder that is often a complaint in the elderly which is characterized by difficulty sleeping and maintaining sleep. There are various recommended therapies for the management of insomnia. One of the therapies used was hypnotherapy which aimed to find out, compare and analyze hypnotherapy as an intervention in Insomnia. **Method.** This study used a systematic review design, following guidelines described by the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA). The library source search was conducted online using the Google Scholar, Pubmed, and Science Direct databases. The keywords used are "effectivity", "hypnotherapy", "insomnia". The literature search was limited to 2013 to 2021. 7 articles were analyzed. The articles were selected using the inclusion criteria, namely full text articles. **Results&Analysis.** Insomnia is still a health problem in the elderly. Various attempts have been made to reduce the incidence of insomnia. Hypnotherapy can be applied to therapeutic. Hypnotherapy provides benefits to reduce insomnia. Hypnotherapy in audio form can increase relaxation thereby reducing insomnia in the elderly. **Discussion.** Interventions carried out using hypnotherapy have potential in today's digital era. Further research is needed to identify, develop and analyze a hypnosis-based insomnia control model on the index of insomnia, anxiety and sleep quality in the elderly. In addition, further research on the mechanism of cognitive therapy that plays a role in the control model.

Keywords: Effectiveness, Hypnotherapy, Insomnia.

INTRODUCTION

Increasing age has an impact on various aspects of human life. These aspects include biological, psychological, social and spiritual. Indirectly affect health. This is because the physiological organs of the body have decreased. Aging is a lifelong process. In connection with this process, there are activities that greatly affect sleep (Dewi, 2014).

The prevalence of insomnia in Indonesia is still relatively high, which is around 67%. This figure is obtained from the population aged over 65 years. According to gender, it was found that insomnia experienced by women amounted to 78.1% at the age of 60-74 years (Sulistyarini & Santoso, 2016).

Insomnia is influenced by various factors. These factors are increasing age, female gender, marital status, smoking

habits, consumption of caffeinated beverages, medical factors, psychological stress and noise (Ali *et al.*, 2019).

Sleep greatly affects individual health. With increasing age, sleep time is also needed which is assessed from the aspect of quality and quantity. The form of sleep disorders experienced by the elderly is insomnia. The elderly will wake up more often when compared to young adults. At the age of young adults, normally they will wake up 2-4 times (Boedhi and Darmojo, 2011).

This condition will have an impact on changes in the social, psychological and physical life of the elderly. Insomnia can lead to an increased risk of degenerative diseases. The diseases are hypertension, heart disease, stress and depression (Ghaddafi, 2013). Therapy for insomnia is carried out with various methods, namely cognitive therapy, complementary therapy, relaxation therapy and so on. Approach with cognitive therapy is a method to change the mindset, the wrong understanding of sufferers about the causes and effects of insomnia. Most sufferers experience anxiety when going to sleep and excessive fear of their condition that has difficulty sleeping. In a recent study, it was found that cognitive therapy can reduce sleep onset by up to 54%. In another study, this method is very useful in insomnia

sufferers, and has the same effectiveness as medical treatment (Lam and MacIna, 2017).

The development of sustainable methods is needed to ensure sustainable change (Bayoh, 2019). One of the methods in cognitive therapy for insomnia is relaxation therapy. This therapy focuses on ways to relax the mind and body thereby reducing anxiety and stress (Ghaddafi, 2013).

This relaxation therapy has several benefits in promoting healthier sleep patterns and sleeping more soundly every night. In addition, it can be used to improve cognitive function and creativity. The most important effect is to relieve negative emotions that affect health and happiness as well as feelings of peace and well-being for a person (Culbert, 2017). This approach is effective for the short-term management of insomnia to elderly patients at the end of life. However, current evidence suggests that sleep quality is better maintained over time with behavioral therapy (Joshi, 2008).

This systematic review describes non-pharmacological therapy for insomnia through cognitive behavioral therapy. The benefits that are expected from this writing, theoretically can contribute to efforts to develop an intervention model based on Cognitive Behavioral therapy. While the practical benefit is to improve

the management of insomnia in services and can be considered as an alternative therapy for the elderly who experience insomnia.

METHOD AND ANALYSIS

This study used a Systematic Review design, following the guidelines described by the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA). The library source search was conducted online using the Google Scholar, Pubmed, and Science Direct databases. The keywords used are "effectivity", "hypnotherapy", "insomnia". Literature searches are limited from 2013 to 2021.

Articles that meet the criteria can be accessed in full text in pdf article format. Inclusion criteria are articles that discuss the benefits of hypnotherapy for insomnia. The exclusion criteria in this search were if the full text could not be accessed, the research was descriptive, the description of the intervention was not operational, and there were duplications. The PICO formulation can be described based on the clinical questions above, namely: P (population): Adult and Elderly

(Adults and Elderly), I (Issue of interest) : Hypnotherapy for Insomnia, C (comparisson) : -, O (output): Health intervention methods. Selection of articles according to the stages shown in the PRISMA Flow Diagram (Moher *et al.*, 2014).

The initial selection of articles is done by identifying the title and abstract. From the search results obtained 405 articles discussing Hypnotherapy as a therapy for insomnia in the elderly in general. Articles were screened through the inclusion criteria of full text in pdf format, then 45 articles were eliminated, and 15 articles were obtained according to the inclusion criteria, and 7 articles were obtained that met the author's criteria. The selection of articles according to the stages is shown in the PRISMA flow diagram in figure 1.

The data from the articles that have been obtained are then carried out by data extraction. This extraction process is carried out by analyzing data based on year, title, research method, sample, results and research suggestions.

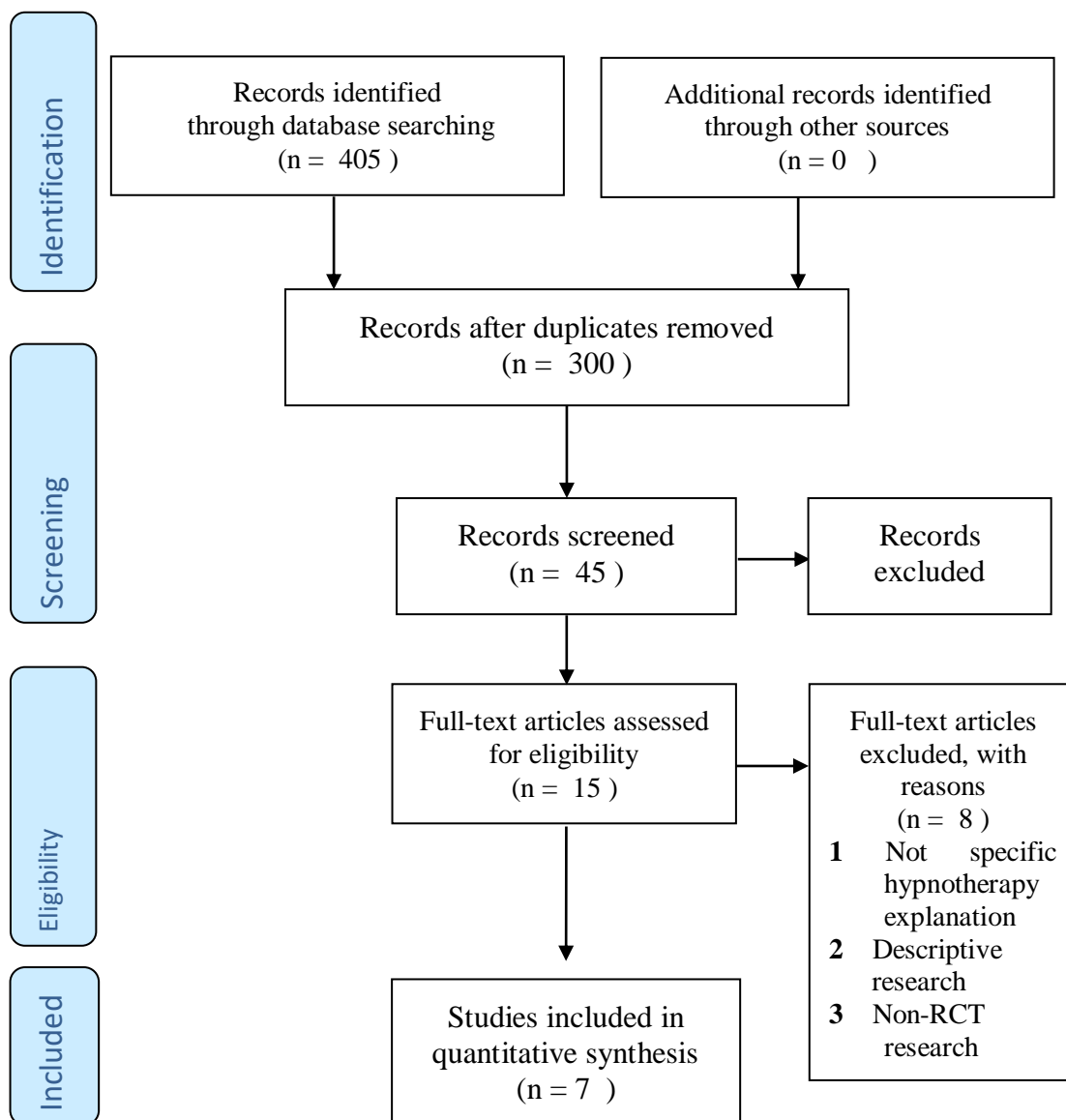


Figure 1. PRISMA Flow Diagram

RESULTS

Table 1 result of systematic literature review, from 15 eligibility articles with the reason excluded 8, articles included as a list below.

Table 1. Studies Included (n=7)

No	Author, Publication Year	Title	Design, Instrument	Sample Size	Findings
1	Cordi et al, 2014	Deepening Sleep by Hypnotic Suggestion	Placebo-controlled crossover design; Slow Wave Sleep (SWS)	n = 70	<ol style="list-style-type: none"> 1. Hypnosis for deeper sleep in healthy women which is highly suggestive resulted in a significant increase in the number of SWS, $P = 0.013$, Cohen $d = 0.77$ 2. Increased slow wave activity due to hypnosis, $P = 0.03$ correlated with time spent in SWS
2	Nursamsu et al, 2015	The Effect of Hypnotherapy on Eldery Insomnia Score Change In Marie Joseph Nursing Home Pontianak City	Pre Experimental Pre-Posttest Design; Questionnaire Insomnia Severity Indeks	n = 10	<ol style="list-style-type: none"> 1. The average score of insomnia before hypnotherapy was 18.3. 2. The average score of insomnia after being given hypnotherapy decreased to 16.7. 3. Hypnotherapy has an effect on insomnia scores in the elderly at Panti Graha Werdha Marie Joseph Pontianak City in 2015 as evidenced by the value of $p = 0.003 < 0.05$
3	Mendoza et al, 2016	Randomized controlled trial of the Valencia model of waking hypnosis plus CBT for pain, fatigue, and sleep management in patients with cancer and cancer survivors	Randomized Controlled Trial; Valencia model of waking hypnosis with cognitive behavioral therapy (VMWHCB T)	n = 44	<ol style="list-style-type: none"> 1. Significantly greater improvement ($P < 0.001$) after active treatment, relative to control conditions, for sleep problems, fatigue, and mean pain intensity. 2. For secondary outcome variables, significant differences between groups appeared for depression ($P < 0.001$), cancer distress ($P < 0.001$), pain disturbance ($P < 0.05$), and catastrophizing pain ($P < 0.05$).
4	Galovski et al, 2016	Augmenting Cognitive Processing	Randomized Controlled	n = 108	<ol style="list-style-type: none"> 1. There was no significant between-group interaction on overall change in

		Therapy to Improve Sleep Impairment in PTSD: A Randomized Controlled Trial	Trial; PTSD questionnaire		PTSD when considering the full model estimate ($p = 0.1$). 2. Both groups showed statistically significant changes in PTSD symptoms ($p < 0.001$).
5	Lam et al, 2018	Hypnotherapy for Insomnia: A Randomized Controlled Trial Comparing Generic and Disease-Specific Suggestions	Randomized Controlled Trial; sleep-diary-derived sleep efficiency	n = 60	1. Mixed linear model on sleep-diary-derived SE, primary outcome, significant for time effect [$F(3,45,548) = 11,683, p < 0.001$], but not for group effect [$F(1,60,078) = 1,361, p = 0.248$]. 2. Other sleep parameters and self-reported questionnaire scores also had significant time effects, but no group effect was significant, except for the HADS depression score, where both time and group effects were not significant 3. Hypnotherapy results in mild improvements in sleep and daily function.
6	Jespersen et al, 2019	A randomized controlled trial of bedtime music for insomnia disorder	Randomized Controlled Trial; <i>Pittsburgh Sleep Quality Indeks</i>	n = 54	1. PSQI scores ranged from 6 to 19, with a mean score of 11.5 (SD 2.75), indicating substantial sleep problems. There were no baseline differences between groups on any of the questionnaire results. 2. The linear mixed model analysis did not show significant group differences in the number of changes in PSQI 3. Paired t-test from baseline to post-intervention showed that there was a significant decrease in PSQI scores of 2.2 points in music. group (95% CI:

				.43.4 to 0.9) compared with a nonsignificant reduction of 1.3 (95% CI: 2.9 to 0.4)
				4. Listening to music at bedtime has a positive impact on sleep perception and quality of life, but has no effect on insomnia severity
7	Schlarb et al, 2018	CBT-I and HT-I group therapy for adults with insomnia in comparison to those with insomnia and comorbid depression – a pilot study	Pilot Study n = 63 compare insomnia therapy (CBT-I) and hypno-therapy for insomnia (HT-I)	<ol style="list-style-type: none"> 1. Depressive symptoms decreased from pre- to post-measurement and follow-up for patients with insomnia comorbid with depression, whereas scores for patients with only insomnia remained relatively low. 2. Both groups showed a significant increase in sleep efficiency and a significant decrease in wake duration after sleep onset. 3. Patients with insomnia and depression who show a significant reduction in sleep latency and a higher rate of regeneration. 4. In non-depressed Insomnia patients, showed a significant improvement in performance of post-follow-up measures. 5. For both groups, there was no change over time for the number of wakes after sleep onset, total sleep time, morning and evening mood.

DISCUSSION

1. Therapy for Insomnia

Insomnia if not treated properly will have a negative impact on quality of life. Insomnia can be associated with anxiety and depression. This can be a

direct relationship in the elderly. A person with insomnia has an increased risk of anxiety and depression (Lam and MacIna, 2017).

The management of insomnia requires a complex therapeutic approach,

tailored to each case, which may include in some cases, in addition to education about sleep hygiene, the hypnotic process as well. Literature is relatively sparse in this area of research; However, studies generally provide reasons that support hypnosis as an effective method in insomnia (Serban *et al.*, 2013).

Research on insomnia has been done a lot. The results of the research conducted. There are two therapies that are used to treat insomnia, namely pharmacological and non-pharmacological therapy. Complications of non-pharmacological therapy are complications. Therefore we need a therapy in the form of non-pharmacological therapy (Wortzel and Spiegel, 2017).

Behavioral therapy in primary care is very important to do as a form of insomnia management. Various aspects of insomnia symptoms can be optimized through group treatment based on Cognitive Behavior Therapy in primary health care. Related research showed that there was a decrease in the average score of the Insomnia Severity Index from 18.4 to 10.7 after therapy was carried out in the treatment group. Significant results were shown for all variables in the sleep diary which included sleep onset latency, total sleep time, wake time after sleep onset, frequency of awakening and sleep quality.

Patients with insomnia complaints can be treated non-pharmacologically in primary health care (Galovski *et al.*, 2016; Sandlund *et al.*, 2017).

2. Non-Pharmacological Therapy for Insomnia

Management of insomnia should be preceded by primary treatment. The thing that must be known before hand is a history of sleep disorders in the individual. In general, insomnia is treated through a non-pharmacological approach. Although effective, this therapy is underutilized by health workers as a primary intervention. Non-pharmacological therapy consists of behavioral, cognitive and physiological interventions. Common cognitive behavioral therapy (CBT) methods for insomnia are: relaxation, control stimuli, sleep restriction, cognitive intervention, sleep hygiene, light therapy and chronotherapy (Joshi, 2008).

Non-pharmacological interventions are the recommended first-line therapy for the elderly with chronic insomnia. Those that can be applied are sleep hygiene practices and cognitive behavioral therapy (Lam and MacIna, 2017). A retrospective study on cases of insomnia was carried out using Mind-Body Interactive Psychotherapy (He *et al.*, 2018). The results showed a significant improvement in sleep conditions. The

narrative method is combined with hypnosis (Cordi, Schlarb and Rasch, 2014).

In real cases, usually using examples of severe cases or chronic diseases with patients who have fully recovered or have made a full recovery (such as cancer, leukemia, psoriasis, paralysis, brain tumors, insomnia, hypertension, fatty liver, depression, and so on), and therapy combined with hypnotic methods through relaxation in a quiet and dark environment (Wortzel and Spiegel, 2017). This study recommends further studies on self-efficacy.

3. Hypnosis as Cognitive Behavioral Therapy in Insomnia

Hypnosis is a form of Cognitive Behavioral Therapy. Various studies that have been conducted on hypnosis are summarized in this systematic review. The search results obtained six studies that specifically discuss hypnosis as cognitive therapy. A randomized clinical trial design provides recommendations and data regarding the efficacy and safety of hypnotherapy in the management of insomnia (T. H. Lam et al., 2018; Mendoza, et,al, 2017)(Elkins et al., 2013).

Cognitive Behavioral Therapy Hypnotherapy method is also effective, especially in disease management and generic for Insomnia. Further studies with larger sample sizes, longer follow-up, and

objective sleep measurements need to be considered further (Lam et al., 2018). Hypnosis can also be used for sleep management. Management is by doing combination therapy. The results of the research that has been carried out have shown positive results. The intervention did not cause side effects. This means that hypnosis is safe to do (Schlarb, Faber and Hautzinger, 2018). In addition, the use of Hypnosis can also be seen as a form of empowerment. This is important because it can improve the skills of the elderly to control themselves against disturbing symptoms (Mendoza, M. E., Capafons, A., Gralow, J. R., Syrjala, K. L., Suárez-Rodríguez, J. M., Fann, J. R., & Jensen, 2017).

Relaxation is needed by patients undergoing hemodialysis in the management of insomnia. One relaxation that can be applied is through music. Research has concluded that listening to music at bedtime has a positive impact on sleep perception and sleep quality, further research needs to be done to analyze the effect of music on the severity of insomnia (He et al., 2018).

CONCLUSION

Insomnia is a sleep disorder that is a complaint in the elderly, which is characterized by difficulty falling asleep and maintaining sleep. There are various

recommended therapies for the management of insomnia. Insomnia therapy is non-pharmacological effective and suitable for the clinical management of insomnia. Non-pharmacological modalities can be used alone or in combination with pharmacological therapy for the effective treatment of insomnia in the elderly. One of the therapies used is Cognitive Behavior Therapy. Hypnosis is the recommended cognitive behavioral therapy. Various studies have shown that hypnosis can be used as an empowerment intervention. Relaxation in Hypnosis is beneficial for interventional management for Insomnia. Interventions carried out using hypnotherapy have potential in today's digital era. Few studies have used hypnotherapy for cases of insomnia in patients undergoing hemodialysis. There has been no research conducted in the hemodialysis room, so it can be recommended as a health program for dialysis patients who experience insomnia. Further research is urgently needed to identify, develop and analyze a hypnosis-based insomnia control model on the index of insomnia, anxiety and quality of life in patients with chronic diseases. In addition, further research on the mechanism of cognitive therapy that plays a role in the control model.

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