The Effectiveness of Hypnotherapy on Arthritis Pain in The Elderly

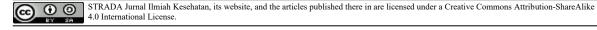**Indah Dewi Ridawati, Eva Oktaviani, Sapondra Wijaya**
Poltekkes Kemenkes Palembang, Indonesia.
* Correspondent Author: indahdewiridawati@gmail.com

ABSTRACT
Most of the elderly have arthritis pain. One of the non-pharmacological treatments for arthritis is hypnotherapy. The purpose of this study was to determine the effectiveness of hypnotherapy on the reduction of arthritis pain in Budi Luhur and Budi Mulia Harapan Kita Nurseries and Saturday Studies, Triwikaton Village, South Sumatra Province. This type of research is a quasi-experimental study without control group design. The sample used was a total sampling of 30 people. Arthritis pain was assessed from the results of the pre test and post test. The results of the Wilcoxon signed rank test showed that the initial and late arthritis pain in the group had a significant difference ($p = 0,000$). Statistically there was effectiveness of hypnotherapy on the reduction of arthritis pain in the elderly. There were changes in the level of pain before and after hypnotherapy was given to the elderly. Hopefully it is necessary to do research with arthritis pain control of inhibiting factors such as hearing disability in the elderly in produce more comprehensive research results.

Keywords: Hypnotherapy, Arthritis Pain, Elderly

BACKGROUND

The percentage of the elderly population both in the world and in Indonesia has increased every year. This is due to an increase in the Life Expectancy rate. One of the health indicators is an increase in life expectancy. The higher the Life expentancy number of a country, the better the health status of a country. According to the Ministry of Health 2013, Life expentancy in Indonesia in 2000 was 64.5 years, 69.43 years in 2010, and 69.65 years in 2011 (Yanti Puspita Sari, 2005).

The increase in life expectancy in the elderly cannot be separated from health problems for each individual, both physically, biologically, mentally and socio-economically. The morbidity rate in non-communicable diseases, cardiovascular diseases and other degenerative diseases shows an increasing trend (Price, 2005). According to data and health information in 2013, non-communicable diseases in the elderly include hypertension, stroke, diabetes mellitus and arthritis or rheumatism (Ministry of Health, 2013).

The disease of joint disorders / rheumatism or arthritis that is most commonly found in the elderly in Indonesia is osteoarthritis (OA) (50-60%). The second group is rheumatism outside the joints (disorders of the supporting components of the joints, inflammation, overuse, and so on). The third is uric acid (gout) about 6-7%. Meanwhile, rheumatoid arthritis (RA) in Indonesia is only 0.1% (1 in 1000-5000 people) (Nainggolan, 2009).

Pain can be reduced with pain management (Ridawati, Indah Dewi; Novia Hidayatu Susanti, 2020). In the implementation of nursing actions, pain can be reduced or stopped with two therapies, namely pharmacological and non-pharmacological therapy. Pharmacological therapy is carried out by administering analgesic drugs, which are used to block the transmission of stimuli so that perceptual changes occur by reducing cortical pain. Meanwhile, non-pharmacological therapy by reducing factors that can increase pain such as distrust, misunderstanding, fear, fatigue and boredom, modifying pain stimuli using techniques such as visual training techniques (watching television, chatting with others, listening to music), techniques relaxation (deep breaths), and skin stimulation (rubbing gently on the painful area, rubbing the back, using warm and cold water, massaging with running water) (Hidayat, 2013). Other non-pharmacological actions to deal with pain, including hypnotherapy, in this case the nurse plays a role in non-pharmacological treatment. Hypnotherapy is a branch of psychological science that studies the benefits of suggestion to overcome problems of thought, feeling, and behavior. If we follow hypnotherapy, we will be guided into a state of trance (relaxation of the mind) so that our minds are ready to accept suggestions given by the hypnotherapist. (Muhammad, 2011). There are two mechanisms that explain hypnotherapy can reduce pain intensity, namely by releasing endorphin hormones so that they block pain impulses and by changing the perception of pain in the cerebral cortex.

Hypnotherapy can reduce the intensity of chronic arthritis pain (Gary Elkins et al, 2009) (Gay M et al, 2002). Research conducted on 17 respondents by Ngatwadi, Mutdasir and Mulyadi (2018), showed that before being given hypnotherapy, 17 respondents felt moderate Rhematoid Arthritis pain (100%). After being given hypnotherapy, there was a change in the level of pain felt by the respondents, namely mild pain by 14 respondents (77.7%) and moderate pain by 3 respondents (22.17%). Awaludin Jahid A and Didik Nugraha (2015) stated that as many as 36 patients with rhematoid arthritis experienced a decrease in pain after being given self hypnosis treatment. The average pain before being given self hypnosis was 3.5 and the average pain after being given self hypnosis was 2.27.

A preliminary study at the Bhakti Mulia, Budi Mulia, and Saturday recitation, Triwikaton Village, South Sumatra Province, obtained data that the elderly who experience arthritis pain

have never undergone hypnotherapy. Some elderly people have received hypnotherapy to reduce headaches due to hypertension. Elderly who experience arthritis pain receive pharmacological drugs to reduce arthritis pain.

METHODS

Arthritis pain sufferers as well as study respondents were collected and informed consent was obtained. Respondents were given knowledge about arthritis pain, hypnotherapy, and provided a question and answer session for 20 minutes. Therapy lasts about 20 minutes. Hypnotherapist is a practitioner who has been certified by the IBH (International Board Hypnotherapy) organization. Respondents were asked to fill out pain questionnaires again immediately after being given therapy.

The results of the pain scale before and after therapy were analyzed to determine the reduction in arthritis pain before and after hypnotherapy was given. The research design used is quantitative research with a quasi-experimental method. The research location is at the Budi Mulia and Budi Luhur Harapan Kita Nursing Home as well as the recitation of the elderly on Saturday Triwikaton, South Sumatra Province. The number of samples taken was the total sampling of all elderly people totaling 30 people who met the inclusion and exclusion criteria. Inclusion criteria: willingness to take part in activities from start to finish, willing to sign an informed consent form, having arthritis pain, respondents are aware and can be actively communicated.

Preparation Stage: In this stage the researcher prepares tools, materials, and space for research. Implementation Stage: after doing the pre-test, implementation of hypnotherapy for 20 minutes. Respondents were asked to answer the pain scale after being given therapy. Independent variable: hypnotherapy. Dependent variable: arthritis pain. The instrument used to obtain data about pain was a numerical scale. The nimeric scale is a pain scale to assess the quality of pain starting from a number 0 which indicates no pain and a number 10 which indicates very pain.

Univariate Analysis Demographic data of respondents on categorical variables (age, socio-culture, environment, information, experience) using proportion analysis and data presented in the form of distribution, frequency, and percentage tables. Meanwhile, variables with numerical data (pain) will be presented in the form of mean, median, and standard deviation. The bivariate analysis of the study was conducted to prove the formulated hypothesis, namely, was there a difference in the average reduction in arthritis pain in the hypnotherapy group. The normality test used the Shapiro-Wilk test ($X \leq 50$ respondents). The Wilcoxon test was used if the data were not normally distributed and was performed to analyze the differences in arthritis pain between before and after the intervention. Ethical Clearance No 475 KEPK/Adm2/X/2020

RESULTS
Characteristics of Respondents by Age
Table 1. Respondents Frequency Distribution Based on Age

Variable	Mean	Minimum	Maximum
Hypnotherapy	68,5	60	82

Source: Primary Data, 2020

The results of the study in the table explained that in the hypnotherapy group the average age was 68.5 years, the youngest age was 60 years and the maximum age was 82 years.

Meanwhile, the average age group is 70 years, the youngest is 60 years old and the maximum age is 100 years.

Characteristics of Respondents Based on Gender
Table 2. Respondents Frequency Distribution by Gender

No	Gender	Hypnotherapy	
		N	%
1	Man	13	43,33
2	Woman	17	56,67
	Total	30	100

Source: Primary Data, 2020

The results of the study in the table explain that the hypnotherapy groups, namely 13 men (43.33%) and 17 women (56.67%).

Characteristics of Respondents Based on Culture
Table 3. Respondents' Frequency Distribution Based on Culture

No	Culture	Hypnotherapy	
		N	%
1	Javanese	14	43,67
2	Sumatran	16	53,33
	Total	30	100

Source: Primary Data, 2020

The results of the study in the table explained that in the hypnotherapy group, there were 14 elderly people with Javanese culture (46.67%) and 16 Sumatran people (53.33%).

Pain Level
Distribution of Pain Levels Before and After Hypnotherapy
Table 4. Distribution of Pain Levels Before and After Hypnotherapy

No	Pain Scale	Number of Respondents		P Value
		Before	After	
1	2	0	4	
2	3	0	2	
3	4	2	12	
4	5	3	2	0,000
5	6	11	6	
6	7	6	3	
7	8	3	1	
8	9	3	0	
9	10	2	0	
	Total	30	30	

Source: Primary Data, 2020

Based on the table above, a general description of the elderly before doing hypnotherapy experienced the most pain scales sequentially, namely 6 pain scale as many as 11 people

(36.67%) and pain scale 7 as many as 6 people (20%). The most pain scale after being given hypnotherapy was pain scale 4, namely 12 people (40%) and pain scale 6 as many as 6 people (20%).

Distribution of Respondents Before Hypnotherapy and After Hypnotherapy Performed
Table 5. Distribution of Respondents Before Hypnotherapy and After Hypnotherapy is performed on the elderly with arthritis

Treatment	N	Mean
Before Hypnotherapy	30	6,73
After Hypnotherapy	30	4,57

Source: Primary Data, 2020

Based on the table, the results obtained from the difference between before hypnotherapy and after hypnotherapy with a mean of 6.73 and 4.57.

Bivariate Analysis
The Effect of Hypnotherapy on Pain Levels
The analysis used in this research is the Wilcoxon test with the aim of knowing about the effect of hypnotherapy on the level of pain in the elderly with arthritis at Budi Mulia, Budi Luhur Werdha Home and the Saturday Year 2020 Kajian Pengajian. The results of the normality test using the Kolmorgov-Smirnov Test were not normally distributed, so it was continued with the Wilcoxon test. Based on the results of the tests that have been carried out, it shows that there is an influence on the level of pain before and after hypnotherapy for the elderly with arthritis at Budi Mulia, Budi Luhur Nursing Home and Saturday recitation in 2020 with p value = 0.000

DISCUSSION
The results of the study of 30 elderly who experienced arthritis pain before intervention in the hypnotherapy treatment group (N = 30) with 6 pain scale were 11 people (36.67%) and 7 pain scale were 6 people (20%). In the analysis of Wilcoxon test data, it was found that the p value of 0.000 ($p < 0.05$) indicated that there was a difference after hypnotherapy was perfomed. The results showed that the average intensity of arthritis pain in hypnotherapy decreased. This is in accordance with the research of Ngatwandi, Mutdasir and Mulyadi (2018) Hypnotherapy on reducing joiny pain in rheumatoid arthritis sufferers. This is confirmed by Awaludin and Didik (2015) that self-hypnosis has an effect on changes in pain intensity in rheumatoid sufferers.
Some of the factors that influence the reduction in pain intensity are because the subconscious mind is the place where humans store all beliefs, values, and control the functions of the human body. Hypnosis therapy or self hypnosis is a very natural process of opening the mind or subconscious mind over a period of time and in a state of relaxation. (Paul, 2018)
At the level of brain waves alpha (8-13 Hz) and theta (4-7 Hz) or at deep relaxation levels are effective areas of hypnosis therapy. Memories are easily embedded and new information is easily stored. In this situation, the focus of respondents' attention is more on suggestions that are implanted into their subconscious mind as an effort to solve problems or facilitate change and health. The suggestion that was implanted in this study, namely to make the respondent experience deep relaxation, change the character of pain and change a

person's attitude towards pain has shown positive results. In other words, hypnosis is effective in reducing pain intensity (Paulus, 2018).

Hypnotherapy is a non-pharmaological pain management technique solution, which is a thought therapy and healing that uses the hypnosis method to give psychological suggestions or messages to change thoughts, feelings and behavior for the better (Novrizal, 2010). In Hypnotherapy, the client's mind and body are relaxed before entering his subconscious. The subconscious mind is a mental process that functions automatically so that the individual is not aware of it. The influence of the subconscious mind on us is 9 times stronger than the conscious mind. That is why many people find it difficult to change even though they consciously want to change. If there is a conflict of desire between the conscious and subconscious mind, the subconscious mind is always the winner. (Gunawan, 2007). Hypnotherapy is an independent action by nurses who have expertise in the field of hypnotherapy as an effort to reduce the pain scale of gout sufferers (Potter & Perry, 2010). Nadi Aprilyadi, Jhon Feri and Indah Dewi Ridawati stated that hypnotherapy can produce taste comfortable so that the sense of comfort can stimulate the endorphins hormone can suppress someone's pain. The conscious mind can contain all of them elements of the traditional process referred to as the "trance phenomenon". Key of hypnosis is the power suggestions or belief in something the positives that appear based on the concept in mind, so it will provide positive energy for a action taken (Aprilyadi, Nadi; Jhon Feri, Indah Dewi Ridawati, 2018).

When giving hypnotherapy, respondents are guided to do imagination thus influencing work brain, brain waves consist of beta waves the most common and their frequency the most height where the working conditions of the brain are in a frequency the most height where the working conditions of the brain are in a conscious state to keep the mind steady focused them into a wave alpha namely the brain waves the frequency is slightly slower compared to beta where the brain works conditions relaxed and relaxed, alpha is a bridge the link between the conscious mind and unconscious, whereas theta that is brain waves generated by subconscious mind and occurs at the moment someone goes through the very state relaxed or very drowsy, in case of and occurs at the moment someone goes through the very state relaxed or very drowsy, in case of condition the transition of these brain waves will be causing the body to relax so that it can increase blood volume and oxygenation to the brain volume and oxygenation to the brain and produce endorphins that can inhibit pain impulses so that a person becomes relax (Aprilyadi, nadi; Jhon Feri, Indah Dewi R, 2018). Immediate hypnotherapy relaxing effect seen when the respondent is in deep trance state viz respondent look relaxed, calm and relaxed, there were even some respondents who appeared fall asleep during hypnosis therapy and can follow the therapy session to completion with great concentration. When in relaxed condition, the attention of the respondent against distracted pain resulting in perception pain and the response to pain changes, the pain that is felt decreases until with lost. There are no negative effects detrimental to the respondent. Almost all says the mood becomes over comfortable, calm, and relaxed. (Aprilyadi, nadi; Jhon Feri, Indah Dewi R, 2018)

CONCLUSION

There was a change in the level of pain before and after hypnotherapy was given to the elderly at the Budi Mulia, Budi Luhur Nursing Home and Saturday Recitation, South Sumatra Province.

Hopefully it is necessary to do research with arthritis pain control of inhibiting factors such as hearing disability in the elderly in produce more comprehensive research results

REFERENCES

A Jahid, Alwaludin. Nugraha, Didik. 2015. *The Effect of Self Hypnosis on Changes in Pain Intensity in Rheumatism Patients*. (596-602)

Ali, Babar et, al. 2015. *Essensial Oils Used in Aromatherapy:Systematic Review. Asian Pasific Journal of Tropical Biomedicine* 2015; 5(8): 601-611

Andarmoyo,S.2013. *Pain Nursing Concepts & Processes*. Jogjakarta : Ar-Ruzz

Andriana, E. 2013. *Give birth without pain with hypnobirthing relaxation method. Revised edition.* Jakarta : Bhuana Ilmu Populer

Aprilyadi, Nadi; Jhon Feri; Indah Dewi Ridawati. 2018. *The Effectiveness of Hypnotherapy on Decreasing Dysmenorrhoea Pain in High School Students.* Journal of Indonesian Nurses Volume 2 No 1, Pages 10-19, May 2018

Arif, Antonius. 2011. *The Handbook Of Hypnoterapy Scripts & Strategies*. Jakarta : Kompas Gramedia

Aryanti, Putu Indraswari. 2020. *Literatur Review: Effectiveness of Non Pharmacological Complementary Therapies on Pain in Clients with Rheumatoid Arthritis.* Jurnal Ners Lentera, Vol 8, No, 1, Maret 2020 (80-90)

Asmadi. 2008. *Nursing Procedural Techniques: Concepts and Applications of Client's Basic Needs.* Jakarta : Salemba Medika

Budi, Prabowo Prasetyo & Rizali, Erwin. 2010. *Quick Ways to Master Hypno Healing Hypnosis for Healing.* Yogyakarta : Grafina Mediacipta Cv

Dobson, James.2006. *Preparing for adolense.*California : Vision House

Efendi, Ferrry & Makhfudli. 2009. *Community Health Nursing: Theory and Practice in Nursing.* Jakarta : Salemba Medika

Elkins, Gary. Et, al. 2007. *Hypnotherapy for the Management of Chronic Pain. Int J Clin Exp Hypn.* 2007 July ; 55(3): 275–287. doi:10.1080/00207140701338621

Gay M, Philippot P, Luminet O. *Differential effectiveness of psychological interventions for reducing osteoarthritis pain: A comparison of Erikson hypnosis and Jacobson relaxation.* European Journal of Pain 2002;6:1–16. [PubMed: 11888223]

Goldberg, B. (2007). *Self Hypnosis, a revolutionary approach to help you overcome habits, fears, and chronic pain through easy-to-use hypnosis techniques*. Yogyakarta: B-First

Hidayat, Aziz Alimul. 2013. *Introduction to Basic Human Needs — Applications of Nursing Concepts and Processes*. Jakarta : Salemba Medika

Lukman, Ningsih Nurma. 2012. *Nursing Care for Clients With Musculoskeletal System Disorders*. Jakarta : Salemba Medika

Masjoer Arif dkk. 2001. *Kapita Selekta Medicine Third Edition Volume 1*. Jakarta : Media Aesculapius

Monks FJ, Knoers, Haditomo. 2002. Developmental Psychology: An Introduction in Its Various Sections. Yogyakarta : Gadjah Mada University Press

Muhammad As'adi. 2011. *Doing Hinotherapy to Make Your Memory as Strong as a Disc*. Yogyakarta : DIVA Press

Muttaqin Arif. 2008. *Textbook of Nursing Care for Clients with Nervous System Disorders*. Jakarta : Salemba Medika

Ngatwadi, Mutdasir dan Mulyadi. 2018. *Differences in the Effectiveness of Hypnotherapy and Deep Breathing Techniques on Joint Pain in Rheumatoid Arthritis Patients.* Jurnal Ilmu Keperawatan (2018) 6:1

Ridawati, Indah Dewi; Novia Hidayatul Susanti. 2020. Application of warm compress and back rub in pregnant women with back pain. Journal of Nursing Widya Gantari Indonesia Vol. 4 No.2, September 2020

Saryono, Widianti Anggriyana Tri. 2011. *Lecture Notes on Basic Human Needs (KDM)*. Jogjakarta : Nuha Medika

Setiyohadi Bambang dkk. 2006. *Internal Medicine*. Jakarta : FKUI

Smeltzer , Suzanne C. 2001. *Textbook of Medical Surgical Nursing. Brunner & Suddarth. Edisi 8*. Jakarta : EGC

Suwandi Awie.2010. *Turbo Hypnosis: Instant Learning Secrets & Practical Hypnosis Application*. Jakarta : PT Gramedia Pustaka Utama

Tambayong Jan. 2000. *Pathophysiology for nursing*. Jakaarta : EGC

Wong Willy, Andri Hakim. 2009. *The Power of Hypnosis*. Jakarta : Visimedia