

Influence of Guide Imagery Technique to Reduce Pain Intensity in Rheumatoid Arthritis Patient (Case Study in Residence Werdha East Surabaya)

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Abstract

Arthritis pain (joint) in elderly is a problem can influences activity daily living. In order to result from Research and Development Health Division (Balitbangkes) Health Departmnet, and Jakarta Health Department during 2006, show the prevalency of musculoskeletal pain which disturbs the activity, is disturbance often occured in the Daily activity most of responden. This study use the design (*One Group pretest-posttest*) is compare result with measure before and after guide imagery technique is did. The total of elderly population suffering of arthritis pain is 23 respondents. By using the Purposive Sampling Technique, was taken 17 respondents. After the data collected, it was Analitik test using *Uji Wilcoxon Test*. Result of this study show that most of elderly before getting the treatment, kriteria of pain in moderate and after getting the treatment, criteria of pain be mild. And then, Three is guide imaginative technique to reduce pain intensity in rheumatoid arthritis $p = 0,000$, $p < \alpha = 0,005$. This study shows that the guide imagery technique can reduces pain intensity in rheumatoid arthritis, and then perhaps by using the guide imaginative technique can applies in carring of elderly with pain, in the residence or in the community.

Kata Kunci : *Guide Imagery, Pain Intensity, Rhemathoid Arthithis*

BACKGROUND

Based on phenomenon in the Community, There are many elderly have a (*Reumatoid Arthritis*). Because of autoimun reaction in the sinovial tissue. The fagositosis process Produces enzim inside the the Joint.

Those enzymes will rend the collagen until to be edema, proliferasi sinovial membran, and compose the panus. Panus will destroye the cartilage and appear the erosion of bone erosi tulang, finally it will lose of Joint surface and disturbe the Joint movement and it be the Rheumatoid Arthritis. The muscle will affected, because muscle fiber will occure alteration of degenerative by lost of muscle elasticity and muscle contraction. And then, it can disturbe the necessary of comfortable is pain, in the pleasant of sleep pattern, and activity pattern (Hidayat, 2010). According to Arthritis Foundation 2006, amount of sufferer in United State America increase significantly. In the 1990, there are 38 million sufferer from 35 million in the 1985, and at the 2005 reach 66 million or close 1 from 3 persons suffer Joint disturbance. As many 42,7 million amongs have diagnosed with atritis and 23,2 million, and reninder of that suffer the cronic joint pain. The prevalency of Reumatoid Arthritis in Indonesia, as a study result by Zeng QY reach 23,6 % until 31,3%. Whereas based on grouping of age, obtained that prevalency sufferer rematoid arthritis more than 15-24 years old is smallest at 8,0%. For most prevalency of rheumatoid arthritis in the group age more than 65 years old is 63%. Have seen is the prevalency it will increase as the rise of age (Nainggolan, 2009).

Main disturbance occures in the Population at the more 45 years old. The last

data from polyclinic Reumatologi RSCM Jakarta shows the amount of sufferer Reumatoid Arthritis visit during Januari until Juni 2007 as many as 203 from all of the visitation as many as 1.346 patients.

Many effort have been do it t reduce the pain in Rheumatoid Arthritis, by by farmacology and non farmacology. Pain Management nyeri by farmacology treatment more effective than non farmacology methode. But farmacology methode more expensive, and have bad effect potentially. Whereas non farmacology methode is cheap, simple, effective, and have no harm effect. Non farmacology methode also can control the felling and strength. Relaxation, breathng technique, movement and change position, massage, hidroterapy, heat or cold therapy, music, guide imagery, acupressure, aromaterapy are many non farmacology technique can increase pain adaptation in elderly (Handerson., Jones.2006).

In order to *National Safety Council* (2004, hlm.85) breathing relaxation is relaxation using breath slowly, aware and depth. Meditation relaxation (*attention-focussing exerses*) is relaxation technique to purify the thought and lost in that moment and behaviour relaxation is psikotherapy based on observation, assumption, belief, and behaviour which can influence the emotional. Guide Imagery is a technique obligates a person to form imagination about everything he is like. Imagination is formed will received as stimulation by sensory perception, and afterwards that stimulation will spread in ke brain stem and toward the sensory thalamus. In the thalamus, that stimulation is formed as the brain language, and small part that stimulation will transmited

to the amigdala and around hippocampus and the large other it will send to the cerebral cortex. In the cerebral cortex and occur the process of sense association, which the sense is analyzed, viewed, and arranged be real thing until the brain identify the object and the means of that presence. Hippocampus has a character as determine sensory signal which reputed important or not until if hippocampus decides the important signal, and then that signal will saved as memory. Anything would like it be the important signal by hippocampus until processed be the memory. When there is a stimulation, like shadow about everything that he is like, memory which have save will appear again and make a sense from the real sensation experience, even influence or result appears only a memory from a sensation (Guyton&Hall, 1997). Guide imagery therapy inside the patient thought can reduce the pain in the

elderly with rheumatoid arthritis.

The purpose of this study is to identify influence guide imagery and to analyze guide technique to reduce pain intensity in rheumatoid arthritis patient

RESEARCH METHODOLOGY

Method, Population, Sample and Time

This study, using the pre experimental design (*One Group pretest-posttest*)) is compare result with measure before and after guide imagery technique is did (Azis, 2013). Sample in this study is elderly with have a rheumatoid arthritis case. Analyze the data using the univariate, and bivariate. Univariate analyze use the wilcoxon test.

RESULT

Distribution of responden according to age

Tabel 5.1 Distribution of responden according to age

Sex	Amount	Percentage
Male	3	17 %
Female	14	83 %
Total	17	100 %

According to the tabel 5.1 show that most of the respondent is female, 14 persons (83 %), while the male only 3 persons (17 %) from 17 respondents.

5.1.3 Specific Data

1. Distribution of responden according to Criteria of pain before and after intervention

Tabel 5.2 Distribution of responden according to criteria of pain before intervention

Criteria of pain	Amount	Percentage
No pain	0	0 %
Mild	0	0 %
Moderate	14	83 %
Severe	3	17 %
Total	17	100 %

2. Distribution of responden according to criteria of pain after intervention

Tabel 5.3 Distribution of responden according to criteria of pain before intervention

Criteria of pain	Amount	Percentage

No pain	6	35 %
Mild	11	65 %
Moderate	0	0 %
Severe	0	0 %
Total	17	100 %

3. Distribution of responden according to diverification criteria of pain between before and after intervention

Tabel 5.4 Distribution of responden according to diverification criteria of pain between before and after intervention

Criteria of pain	Before		After	
	Amount	Percentage	Amount	Percentage
No pain	0	0 %	6	35 %
Mild	0	0 %	11	65 %
Moderate	14	83 %	0	0 %
Severe	3	17 %	0	0 %
Total	17	100 %	17	100 %
$\rho = 0,000$ until $\rho < 0,005$				

According to tabel 5.4 shows that there is difference in criteria of scale before and after intervention. Based on analyze Wicoxon Test , $\rho = 0.000$ and $\alpha = 0,005$ till $\rho < \alpha$, it means there is influence guide imagery technique to reduce pain in rematoid arthritis.

DISCUSSION

According to result this study about transfer of pain with guide imaginative in elderly before intervention from 17 respondents, most of them 14 respondents

(83%) get moderate pain. And another get no pain and mild pain sebesar (0%). After getting the intervention guide imagery, most of them 11 respondents (65%) get mild pain and another (0%) respondents or no one respondent feel moderate and severe pain. According to tabel 5.4 show that there is difference kriteria of pain between before and after intreviewtion. Based on analyze Wicoxon Test, $p = 0.000$ dan $\alpha = 0,005$ sehingga $p < \alpha$, it means there is influence guide imagery to reduce pain in rheumatoid arthritis.

As National Safety Council (2004, hlm.85), breathing relaxation is a relaxation methode using breath slowly, aware, and depth. Meditation relaxation (*attention-focussing exerses*) is relaxation technique to purify the thought and lost in that moment and behaviour relaxation is psikoterapi based on observation, assumption, belief, and behaviour which can influence the emotional. Guide imagery is a technique obligates a person to form imagination about everything he is like. Imagination is formed will received as stimulation by sensory perception, and afterwards that stimulation will spread in ke brain stem and toward the sensory thalamus. In the thalamus, that stimulation is formed as the brain language, and small part that stimulation will transmited to the amigdala and arround hippocampus and the large other it will send to the serebri cortex. In the serebri cortex and occure the proces of sense association, which the sense is analyzed, viewed, and arranged be real thing until the

brain identify the object and the means of that presence. Hypokampus has a character as determine sensory signal which reputed importnat or not until if hypokampus decides the important signal, and then that signal will saved as memory. Anything would like it be the important signal by hypokampus until processed be the memory. When there is a stimulation, like shadow about everything that he is like, memory which have save will appear again and make a sense from the real sensation experience, even influence or result appears only a memory from a sensation (Guyton&Hall, 1997). Guide imagery therapy inside the patient thought can reduce the pain in the elderly wih rheumatoid arthritis

According to explanation above, respondents with rheumatoid arthritis before intervention to transfer pain using guide imagery therapy, many responden get moderate pain and have not solven the pain not yet well. This because, less of information or knowledge in each respondents in the information source. Then, it's very important for tool to Gide the information about transfer the pain, especially guide imagery technique because that technique can applied freely, only need capabilty for consentracion and calm environment to improve the coping.

Degree of success using the guide imaginative to reduce the pain, also influenced by attitude the patient who they do the guide imagery technique right and correctly. If the patient do the instruction well, and the the result also get the good result. Definition Petty

& 'Cacioppo completely said if the attitude is general evaluation is made human for him self, people, object and issues (dalam Azwar, 2007). The attitude as predisposition which learned it to responses consistently in the certain methode which related with certain object. Experience will results the difference of understanding in every individual. And then, experience have a relation with knowledge. Good attitude in respondents in the transfer intervention for pain with guide imagery therapy, caused of experience or direction was given before intervention begins, for the right direction and good communication in elderly, it's determine the success of intervention.

Result of this study accordance with another study before by chandra (2014) where the guide imagery technique can reduce pain in the post operation Sectio Ceasaria with the value $p=0,000$. Same study also explained by Fitrawaty (show that intensity of pain scale before guide imagery given, shows in the moderate and severe scale to be mild moderate Rafter intervention with p value = 0,000, it means there is influence guide imagery technique to reduce pain in post apendektomi patient.

CONCLUSION

1. Criteria of pain in elderly before giving the guide imagery technique severe and moderate.
2. Criteria of pain in elderly after giving the guide imagery technique severe and mild.

3. There is influence of guide imagery technique to reduce pain intensity in rheumatoid arthritis patient

REFERENCE

- Ann M. Tomey & Martha R. Alligood. (2002). *Nursing Theori stand Their Work*. United State of America: Mosby Elsevie
- Brunner & Suddarth. 2002. *Keperawatan Medikal Bedah*. EGC: Jakarta
- CushJ, John, Weinblatt Michael E, Kavanaugh Arthur. 2010. *Rhemathoid Arthritis Early Diagnosis and Threatment edisi3*. Medical Publishing Company : Philadhepia
- Chandra Kristianto. 2013. *Efektifitas Teknik Relaksasi Nafas Dalam dan Guide Imagery Terhadap Penurunan Nyeri Pada pasien Post Op Sectio Ceasaria*. Vol 1 No 1 <http://ejournal.unsrat.ac.id/index.php/jkp/article/view/216>. jam 16.00
- Dennis, Connie M. 1997. *Self care deficit theory of nursing concepts and applications*. United States of America: Mosby A Times Mirror Company.
- Fitrawaty. (2014) *Pengaruh Teknik Guided Imagery (Imajinasi terbimbing) terhadap penurunan Nyeri pada Pasien Post Appendektomi di Ruang Bedah RSUD Prof. Dr. Hi Aloei. Saboe Kota*

- Gorontalo.Kim.ung.ac.id/index.php/KIMFIKK/article. Jam 16.30
- George,J.B(1995).*Nursing Theoris: The Base for Profesional Nursing Practice*. Fourthedition, applet on & Lange, Connecticut
- Guyton&Hal.1997.*Fisiologi Kedokteran*. EGC : Jakarta
- Hidayat, A.A.A (2010), *Metode Penelitian Kesehatan Paradigma Kuantitatif*, Salemba Medika, Jakarta.
- Louie (2004). *The effect of guided imagery relaxation in people with COPD*,Occupational Therapy International,11(3),145-159
- Mooth Robert, JonesNigel. 2004. *Rhemathoid Arthithis*. Churchil Living stone: China
- National Safety Council. (2004). *Manajemen Stres*. Jakarta: EGC.
- Nainggolan, Olwin (2009). *Manajemen Kedokteran Indonesia*. Volume: 12. Nomor: 12. From <https://www.google.com/sear>
- Perry, Poter. 2006. *Fundamental Keperawatan*. EGC:Jakarta
- Sitzman, Kathleen. 2011. *Undestanding the work of nurses theorists:acreative beginning second edition*. United State of America.
- Sue C. Delaune and Praticia K.Ladner. 2002. *Fundamental of Nursing Standards & Practice Second Edition*.United States of America: Delmar Thomson Learning
- Wiliiam E, S. David, F. Haynes Barton. 2004. *Rhemathoid Arthithis*. Lippicot William:Philadhepia USA.