

Effect On The Decrease Of Gymnastics Rheumatic Pain In Patients Myalgia In Health Centre For Elderly Batuaji Ringinrejo Kediri

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Abstract: Still many elderly who have myalgia and myalgia considers it a matter of course, that in fact if not promptly treated can be a fatal problem. The purpose of this study was to determine the effect on the decrease in the level of gymnastics arthritic pain in patients with myalgia in IHC Elderly Village Batuaji Ringinrejo Subdistrict Kediri. This study design is pre experiment with the type of One Group Pre-Post Test Design. The population is all elderly who have myalgia in health centre. By purposive sampling of respondents found as many as 26 people and statistically using Wilcoxon test. Of the total 26 respondents, prior to gymnastics arthritis who experience mild pain as much as 16 respondents (42.3%), moderate pain as much as 15 respondents (57.7%). Meanwhile, after doing gymnastics arthritis who experience mild pain as much as 16 respondents (61.6%), who experience moderate pain as much as one respondent (3.8%), and the pain is not as much as 9 respondents (34.6%). From the analysis of the data with the Wilcoxon test showed that there was gymnastics rheumatic effect on the reduction of pain in patients with myalgia in health centre for elderly batuaji ringinrejo kediri. Based on this research can lead to arthritis exercises increase flexibility of the joints of the limbs of the body so as to reduce the pain.

Keywords: Gymnastics Rheumatism, decline in level of pain, Myalgia

1 Introduction

The process of aging is not a disease, but rather a period or stage of human life, namely: infant, child, adult, elderly, and elderly. The process being old who cause a problem physically, mentally, and socially. The resignation of the physical circumstances can lead to decreased quality of life and activity (Gendasari, 2010). Advanced age is a continuation of adulthood, comprised of phase prasenium (age 55-65 years), and the phase senium (seniors over the age of 65 years). The decline in the function of various organs of the elderly become vulnerable to the illness that is acute or chronic. The increase in the number of elderly is high potential to cause various problems both from the aspect of social, economic, cultural, and health (Nugroho, 2008). Diseases that often occur in the elderly include impaired vision, osteoporosis, glaucoma, hearing loss, Alzheimer's, arthritis, diseases which often occur in the elderly is one of them myalgia arthritis. Almost everyone has experienced myalgia, this disease is caused by an overload on the muscles, or due to less active lifestyles. If the disease is left unchallenged, myalgia disease can cause decreased muscle function and joint surroundings that inhibit physical activity and quality of life of patients (Agoes Aswar, 2011). In this globalization era, non-communicable diseases have increased, one of which is myalgia. The prevalence of myalgia in Indonesia reached 31.2%, myalgia patients worldwide reached 355 million, is expected this figure will continue to rise until 2025 with indications of 25% will experience paralysis. Based on preliminary studies that have been conducted on July 6, 2015 in the village of Posyandu Elderly Batuaji Ringin Rejo District of Kediri found that the number of elderly in Posyandu is 37 people. Of the 37 elderly there are 28 people suffering from myalgia. Almost all the elderly complain of pain at the nape of the neck, back and waist. The pain has lasted a long time. Myalgia, or so-called muscle pain is a symptom of many diseases and disorders of the body. Common causes of myalgia are using the wrong muscle or muscles are too tense. Myalgia that occur without a history of trauma may be caused by a viral infection. Myalgia that lasts for a long time showed myopati metabolic, nutritional deficiencies or chronic fatigue syndrome (AgoesAswar, 2011). Handling myalgia can be done with pharmacological treatment and non-pharmacological

therapy. Sikloogenase pharmacological therapy using inhibitors often cause side effects are gastrointestinal disorders for example hearthburn (Daniel, 2006). Cutaneous stimulation, distraction, relaxation, guided imagery and hypnosis are examples of non-pharmacological therapy to manage pain. Gymnastics is a regular series of motion tone and focused and planned to do individually or in groups (Santosa, 2013). While gymnastics rheumatism was the intervention chosen by the researchers to treat pain in patients with myalgia, where gymnastics rheumatism which movements are performed regularly and organized for people with joint and muscle pain. Where gymnastics rheumatism to make more pliable bones, muscles - the muscles become toned, improving blood circulation, accelerate lymph fluid, keeping the fat levels remain normal, the heart becomes healthier, not easily injured, and reaction speed to get better. Thus if only non-pharmacological therapy can be one of the alternatives (Daniel, 2006). Pain in myalgia caused primarily in youth are working hard, so that the load borne by the joints of the body is too large, it can cause damage to the joint surface. The joint surface will be scratched, so it no longer intact because it's every movement painful wrenching. Their levels of certain substances in the blood that increases can also cause myalgia. The presence of metabolic disorders of uric acid in a person's body, so that the levels of uric acid in the blood is high, this condition is often the cause myalgia. In patients with myalgia, one of which is recommended for do specific exercises that can be helpful in maintaining joint function, one gymnastics rheumatism. Gymnastics rheumatism is movements performed regularly and organized for people with joint and muscle pain. The aim of these to make gymnastics rheumatic stiff bone and joints become more flexible, so that it will become more relaxed and the pain will be eased Some solutions that can reduce pain, among others by means of stimulation and Massase, skin stimulation, transcutaneous electrical nerve stimulation (TENS), distaksi, relaxation techniques, guided imagery, hypnosis, neuro surgical methods.

Formulation of the problem

Is there any influence of gymnastics rheumatism to decreased levels of pain in patients with myalgia in Posyandu Elderly

Ringin Rejo village Batuaji District of Kediri.

Research purposes

Knowing the influence of gymnastics rheumatism to decreased levels of pain in patients myalgian in Posyandu Elderly Ringin Rejo village Batuaji District of Kediri. Identify the level of pain in patients with arthritis in his gymnastics myalgia before Posyandu Elderly Ringin Rejo village Batuaji District of Kediri.

Benefits of research

In addition to science for the reader or writer about the influence of gymnastics rheumatism to decreased levels of pain in patients with myalgia in Posyandu Elderly Ringin Rejo village Batuaji District of Kediri. As input for the village to motivate the elderly gymnastics rheumatism as an alternative to reduce pain in patients with myalgia.

2 MATERIAL AND METHODS RESEARCH

Design of the research is Pre Experiments with type One Group pre Post Test Design. This study reveals a causal relationship by engaging a group of subjects. Group of subjects was observed before the intervention, and then observed again after the intervention (Nursalam, 2008). The population in this study were all elderly who have myalgia totaling 38 respondents and sample in this study were mostly elderly who havemyalgia in Posyandu. The sampling technique that will be used in this research is purposive sampling technique sampling is based on the expected researcher (Nursalam, 2011). The data in this study are the data collected from the observation sheets and documentation of disease history myalgia, steering an mingled with the following stages: Editing (on the record), scoring (scoring), Coding (coding), Tabulating.

3 RESULTS AND DISCUSSION

3.1 Results

3.1.1 Characteristics of Respondents

Respondent characteristics include age, gender, medical history that ever suffered and therapies ever conducted.

Table 1 The frequency distribution of respondents by age, sex, history of disease who had suffered and therapy ever ever do in Posyandu Elderly Ringin Rejo village Batuaji District of Kediri.

No.	Characteristics	ΣN	Σ%
1	Age		
	50-60 Years	10	38
	61-70 Years	8	31
	> 70 Years	8	31
2	Gender		
	Man	9	35
	Female	17	65
3	Disease history that ever suffered		
	Diabetes	9	34
	Growth disorders	2	8
	joints surgery	2	8
	injuries joints	9	35
	Cholesterol	4	15
4	Therapy ever conducted		
	Drugs	92	92
	Backs Massage	8	8
	Sport	0	0

Table 2 The frequency distribution of respondents by the level of pain in patients with arthritis in his gymnastics myalgia after Posyandu Elderly Ringin Rejo village Batuaji District of Kediri.

No.	Category	Before		After	
		ΣN	Σ%	ΣN	Σ%
1	No Pain	0	0	9	34.6
2	Mild pain	11	42.3	16	61.5
3	Moderate pain	15	57.7	1	3.8

Table 4.3 A cross tabulation between the level of pain in patients before and after exercise myalgia arthritis in Posyandu Elderly Batuaji Desa Ringin Rejo District of Kediri.

Gymnastics Rheumatism		pain post			Total
		painless	mild pain	moderate pain	
pain pre	mild pain amount	9	2	0	11
	% Of total	34.6%	7.7%	.0%	42.3%
moderate pain	amount	0	14	1	15
	% Of total	.0%	53.8%	3.8%	57.7%
Total	amount	9	16	1	26
	% Of total	34.6%	61.5%	3.8%	100.0%

Table 4.4 Statistical test results gymnastics rheumatic effect on reduction of pain in patients with myalgia in Posyandu Village Batuaji Ringinrejo District of Kediri

Test Statistics ^b

	Post Pain - Pain pre
Z	-4796 ^a
Asymp. Sig. (2-tailed)	.000

3.2 Discussion

Level of Pain In Patients Before Gymnastics Rheumatism Myalgia Posyandu Elderly In an Ringin village Batuaji District Rejo Kediri

Pain in patients with arthritis in his gymnastics myalgia before Posyandu Elderly Village Batuaji Ringinrejo District of Kediri in mind that the majority of respondents in the category of moderate pain that is 15 people (57.7%). Most of the respondents aged 50-60 years is 10 respondents (39%). The prevalence of chronic pain increased in the elderly. In the majority of the elderly are frequent complaints are myalgia (Harsono, 2009). Myalgia was the most prominent symptom and is the most frequent reason for a person to seek medical help (Koopman, 2007). Their joint pain myalgia often makes people afraid to move so that interfere with daily activities and can decrease productivity (Potter, 2010). The number of respondents aged 50-60 years causing respondents had suffered physical setbacks conditions include reduced bone density and the hardening of cartilage in the joints that results in the emergence of pain. At the age of 45 years, began to occur degenerative diseases of the knee due to destruction of joint cartilage is called arthritis. Patients in the early stages will complain stiff joints in the morning after a long time with pain in the knee, especially when squatting, standing or climbing

stairs and ends with pain permanent and joint movement is so limited that sometimes force patients to no longer run though body condition is still quite healthy. Reduced joint flexibility encourages joints become stiff, it takes effort to increase joint flexibility, because the joints in patients who have never driven myalgia will decrease flexibility so as to encourage the occurrence of joint stiffness. Results of research conducted showed that respondents who experienced pain were as many as 15 respondents (57.7%) and those with mild pain as much as 11 respondents (42.3%). Most of the respondents complained of pain in the knee, back and nape. The pain has been felt for a long time. Most of the respondents who experienced pain have a tendency to consume foods that contain nuts such as peanuts, soybeans, kacang length, etc. and pattern of lack of proper rest. This condition must push the issue if that increase was not accompanied by efforts other healing therapies, for example by carrying out exercises to improve joint flexibility. The impact of these conditions is the decreasing mobility of the respondents. Decreased mobility ultimately further improve joint stiffness, further enhancing the pain.

Myalgia Pain Levels In Patients After Gymnastics Rheumatism In Posyandu Elderly Ringin Rejo village Batuaji District of Kediri

Pain In Patients After Gymnastics Rheumatism Myalgia Posyandu Elderly In Village Batuaji Ringinrejo District of Kediri in mind that the majority of respondents in the category of mild pain that is 16 people (61.6%). Pain management can be done with pharmacological treatment and non-pharmacological therapy. Sikloogenase pharmacological therapy using inhibitors often cause side effects are gastrointestinal disorders, for example heartburn. In addition, long-term use can cause bleeding in the gastrointestinal tract, perforation, and renal impairment. Thus presumably non-pharmacological therapy can be one of the alternatives (Daniel, 2006). Cutaneous stimulation, distraction, relaxation, guided imagery and hypnosis are examples of non-pharmacological therapy to manage pain. In myalgia, pain management generally with cutaneous stimulation: therapeutic hot / cold, exercise / physical activity, and distraction (Koopman, 2007). Results of research conducted showed that after a gymnastics rheumatism respondents who experienced moderate pain as much as 1 respondents (4%), which experienced a mild pain, 16 respondents (62%) and who do not experience pain 9 respondents (35%). Before entering a period of activity of elderly respondents is quite high initially, but after entering the age of the elderly had increased dramatically decreased so as to cause the appearance of stiffness in the joints. After doing gymnastics rheumatism majority of respondents said that the pain was reduced, and the respondents said it had changed the diet and rest. So the condition of joint flexibility elderly gradually improved which can lead to decreased pain on respondents. Myalgia common in the elderly. Myalgia common in men and women after the age of 45 years, but myalgia often in women caused by reduced estrogen as estrogen serves to regulate calcium, then with decreasing levels of estrogen, calcium is removed from the bones. By lowering blood calcium levels, it can affect the regeneration of bone and lead to osteoarthritis. In patients who do not move the joints myalgia or too much rest will experience joint stiffness. By implementing gymnastics rheumatism, where the movement in gymnastics rheumatism are limited and do not provide

excessive load on the joints will cause the joints more flexible so that the level of pain that occurs when the joint is moved decreases.

Effect of Gymnastics Against Rheumatism Pain Levels Decline In Elderly Patients Myalgia In IHC Ringin Rejo village Batuaji District of Kediri

The statistical test result known by Wilcoxon obtained p value (0.000) $< \alpha$ (0.05) then H_0 rejected and H_1 accepted which means that there was gymnastics rheumatic effect on reduction of pain in patients with myalgia in Posyandu Ringinrejo village Batuaji District of Kediri. Gymnastics rheumatism which movements are performed regularly and organized for people with joint and muscle pain that aims to make the spine more flexible, muscles - the muscles become toned, improving blood circulation, accelerate lymph fluid, keeping the fat levels remain normal, the heart becomes healthier, not easily injured, and the reaction speed to be better (Daniel, 2006). Effect of exercise can affect the perception of pain through stimulation of the endogenous opioid system and by increased blood pressure and arterial baroreceptor stimulation (Kusyati, 2014). The benefits of gymnastics rheumatism among others the bones become more flexible, the muscles will be toned, improving blood circulation, accelerate lymph fluid, keeping the fat levels remain normal, the heart becomes healthier, not prone to injury, the reaction rate becomes better (Anne Charlish, 2013). Of the 26 respondents changes in respondents' level of pain, of 15 respondents (57.7%) who initially had moderate pain became mild pain as much as 16 respondents (61.5%) after gymnastics rheumatism. This is because respondents had followed the advice of researchers to reduce the consumption of foods containing nuts and foods containing fat and respondents have set the pattern for rest. Respondents who initially had mild pain as much as 14 respondents (53.8%) change the level of pain is not pain as much as 9 respondents (34.6%) because almost all respondents to reduce the consumption of nuts and foods that contain fat and regulate patterns of rest. Besides, all respondents were given the intervention gymnastics rheumatism. With gymnastics rheumatism will be acquired state of relaxation so as to encourage the decreasing level of pain in patients with myalgia. Another effect obtained is to improve joint flexibility and reduce atrophy in the leg muscles. The impact of this is that the joints will be more easily moved so that it will lead to decreased levels of pain although not 100% pain relief. With gymnastics rheumatic conditions can also be obtained blood circulation more smoothly so as to improve the delivery of nutrients to repair joints, although the process of regeneration in elderly slow walk at least this condition can reduce the level of pain. The results showed the average respondent experienced myalgia cause inflammation in the joints of respondents, consequently making efforts to reduce the pain caused by joint stiffness. These conditions encourage the exercise done through the implementation of effective exercise for arthritic still do.

4 CONCLUSIONS AND SUGGESTION

4.1 Conclusions

Based on the analysis and discussion can be concluded that The level of pain in patients with arthritis in his gymnastics myalgia before Posyandu Elderly Ringin Rejo village Batuaji

District of Kediri in the category of moderate pain as much as 57.7% (15 res correspondent) from a total of 26respondents. Levels of pain in patients with arthritis in his gymnastics myalgia after Posyandu Elderly Village Batuaji Ringin Rejo subdistrict Kediri in the category of mild pain as much as 61.5% (16 res correspondent) from a total of 26 respondents. the results of Wilcoxon statistical test with a value of $\alpha = 0.05$ p value = 0.000 <0.05 so that it can be concluded that H0 rejected and H1 accepted, which means that there is the influence of gymnastics rheumatism to decreased levels of pain in patients with myalgia in Posyandu Elderly Ringinrejo Village Batuaji District of Kediri.

4.2 Suggestion

Based on this research, the advice of researchers to place research in iharapkan can perform gymnastics rheumatism every Posyandu in elderly followed posyandu elderly who suffer from myalgia to reduce the pain. For respondents are expected can perform gymnastics rheumatism regular basis so as to reduce pain that occurs. But preferably in performing gymnastics rheumatism, the elderly are expected to pay attention condition recurrence rate of pain that occurs. For educational institutions are expected students and teachers can create motion exercises for the elderly.

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