

## Effect of Self-Management and Home Remedy on Symptoms of Rheumatoid Arthritis among Elderly Clients

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### Abstract:

**Background:** Rheumatoid arthritis is a chronic inflammatory condition affecting the joints. It exerts a significant burden on the individual and community. Arthritis care offers self-management training courses. It includes keeping active, looking after the joints, using heated pads, using a cold pack, complementary therapies and massage. **Aim of the study:** was to examine the effect of self-management and home remedy on symptoms of rheumatoid arthritis among elderly clients. **Subjects & Methods: Research design:** A quasi-experimental design with pre and posttest was adopted. **Setting:** This study was carried out at the outpatient clinics in comprehensive medical center and university hospital in Shebin Elkom City, Menoufia Governorate, Egypt. **Subjects:** A total of 90 elderly clients recruited from outpatient clinics. **Tools of data collection:** A Structured interviewing questionnaire and Affected and non-affected joints pain assessment sheet. **Results:** The mean age of the participants was 66.8 years old. Fifty percent of them had a family history of arthritis. There were a significant reduction of joints swelling, redness, duration of stiffness, and feeling of fatigue from pre to post test ( $p < 0.05^*$ ). Majority of the elderly clients felt better with rest, splint, hot compresses and massage with ointments. The home remedy affected positively on the pulse, systolic and diastolic blood pressure besides reducing their joints pain and swelling. **Conclusion:** The present study concluded that after intervention elderly clients who used self-management measures had a significant reduction of rheumatoid arthritis joints pain, swelling, redness, and stiffness. Additionally, home remedy and self-management affected positively on pulse and blood pressure of the clients besides reducing their arthritis pain. **Recommendations:** Encourage the elderly clients to use the self-management measures to reduce RA joints pain. Also combination between self-management measures and home remedy are effective.

**Key words:** Self-Management; Home remedy; Elderly; Rheumatoid Arthritis.

### Introduction:

Old age comprises the later part of life. It is the period of life after youth and middle age. <sup>(1)</sup> Most developed world countries have accepted the chronological age of 65 years as a definition of 'elderly person, but this does not adapt well to the situation in Africa. At the moment, the United Nations agreed that, sixty years and more refers to the older population. <sup>(2)</sup> The age of elderly people in Egypt who ranged from 60-64 years old constituted about 6.7% (male 2,888,193/female 2,973,531) while persons aged 65 years and over constituted about 5% with life expectancy 73.45 years old. <sup>(3)</sup> Older persons have at least one chronic condition. The most frequently occurring conditions were uncontrolled

hypertension (34%), and arthritis (50%). <sup>(4)</sup> According to the US Census Bureau, International Data Base; 2004, prevalence of RA in Egypt was 699,608. <sup>(5)</sup> Only Egypt and Tunisia have a Community Oriented Program for Central Control of Rheumatic Diseases (COPCORD) center in Africa, and only a single survey has been published regarding the prevalence of Rheumatoid arthritis (RA) by African League of Associations for Rheumatology. <sup>(6)</sup>

RA is an inflammatory disease affects the small joints of the hands, and feet. It can result in the destruction of joints, disability, and life threatening complications. <sup>(7,8)</sup> RA symptoms and signs include fatigue, joint pain, swollen joints, fever, loss of joint

function, as well as joint stiffness, redness, warmth, tenderness, and deformity.<sup>(8)</sup> It leads to independence in performing many daily activities, and decrease of working ability.<sup>(9)</sup>

RA is an ongoing progressive auto-immune disease that affects about 1% of the general population worldwide.<sup>(10-12)</sup> It most commonly begins between the ages of 40 and 60. It affects women three times more than men.<sup>(11,13)</sup> The reported percent for arthritis were 26.0% of women compared to 19.1% of men. Among persons who ages 45–64, more than thirty percent of them diagnosed with arthritis while persons who ages 65 or older, the percent increased to 49.7%. Also people who are overweight or obese report arthritis more often than people with a lower body mass index.<sup>(14)</sup> RA is the most common cause of disability. It limits the activities of 22.7 million Americans, preventing them from being able to climb stairs or walk more than short distances. For 1 of 3 adults of working age with arthritis, it can limit the type or amount of work they do. Nearly 44% of adults with arthritis report no leisure time physical activity. Also not being physically active is a risk factor for other chronic diseases and makes it harder to manage these conditions.<sup>(15)</sup>

The best treatment of RA needs more than medicines. Patient education, such as how to cope with the disease is important. Studies show that, people who receive early treatment for RA feel better sooner and more often, and are more likely to lead an active life.<sup>(16)</sup> The major goals of treatment are to decrease illness symptoms by relieving of pain, reduce inflammation, slow down or stop joint damage, prevent disability, and preserve or improve the patient's sense of wellbeing and improve the patient ability to function.<sup>(9,17)</sup> Treatment might slow down joint damage. The doctor might also suggest anti-rheumatic drugs. Corticosteroids can ease swelling. While the biologic response modifier,

blocks the damage done by the immune system.<sup>(18)</sup>

The rehabilitation management of individuals with RA is imperative to decrease the potential long-term disabilities. Fortunately, under proper counseling, individuals with rheumatoid arthritis can safely exercise, improving overall physical fitness, greater ease for activities of daily living and an improved sense of wellbeing. Rehabilitative techniques include appropriate periods of rest and activity modification; therapeutic modalities such as heat/cold or electrical stimulation; bracing and adaptive equipment.<sup>(19)</sup>

Self-management means taking control of living with the person condition, and is crucial for emotional and physical wellbeing. Arthritis care offers self-management training courses that teach techniques and offer support on living positively with arthritis. Self-management includes use a combination of keeping active, looking after the joints, try to balance rest with activity, having a warm bath and using heated pads to reduce stiffness, using a cold pack to reduce swelling, complementary therapies, and massage.<sup>(20)</sup> Educational programs are developing in rheumatology, and there is evidence to support their effectiveness. The symptom control measures also include the use of appropriate rest of joints when they are actively inflamed and exercise to maintain muscle power.<sup>(21)</sup>

Ginger and turmeric are two of the best herbs to relieve joint pain. The strong anti-inflammatory properties of ginger are excellent for dealing with muscle and arthritic pain. Ginger contains powerful anti-inflammatory substances called gingerols. These have been tested in various researches of rheumatic diseases such as osteoarthritis or RA. The client can take 1/2 teaspoon each of powdered ginger and turmeric powder instead of root. Brew this in 2 cups of boiling water for about 15 – 30

minutes. Strain the tea to remove the herbs and add a little bit of honey or stevia to sweeten the tea and drink this regularly to get complete relief from the arthritis pain. The participants in the research reported a gradual reduction of pain, improving movement and reduction in swelling when using ginger regularly. <sup>(22,23)</sup> Also it is important to improve patients' understanding of RA and its management through educational activities and self-management programs to enable them to get the best from their medication, learn how to better manage disease flares, pain and fatigue, and improve their overall quality of life. <sup>(24)</sup>

#### **Significance of the study:**

Elderly people in Egypt who aged from 60-64 years old constituted about 6.7% while persons aged 65 years and over constituted about 5%.<sup>(3)</sup> Fifty percent of the older persons suffered from arthritis.<sup>(4)</sup> It can result in the destruction of joints, disability, and life threatening complications. <sup>(7,8)</sup>

According to the US Census Bureau International Data Base <sup>(5)</sup> prevalence of RA in Egypt was 699,608. Despite improvements in treating joint diseases, the extra-articular burden in RA remains substantial, encompassing psychosocial impairments. <sup>(25)</sup> Self-management is the individual's ability to manage the symptoms, treatment, physical and psychosocial consequences and lifestyle changes inherent in living with a chronic condition. It includes learning how to look after self and keeping as well as possible. <sup>(26)</sup>

#### **Aim of the study:**

The aim of the present study was to examine the effect of self-management and home remedy on symptoms of rheumatoid arthritis among elderly clients.

#### **Research hypothesis:**

- Elderly clients who will use the self-management measures will have a reduction of rheumatoid arthritis pain.

- Home remedy and self-management measures will affect positively on the physical functioning of the elderly clients.

#### **Subjects and methods:**

##### **Research Design:**

A quasi experimental research design with pretest- posttest was used.

##### **Study setting:**

The study was carried out at the outpatient clinics in comprehensive medical center and university hospital in Shebin Elkom City, Menoufia Governorate, Egypt.

##### **Study subjects:**

A convenience sample of 90 elderly clients who fulfilling the following criteria:

- Aged 60 years and more.
- Diagnosed with arthritis.
- Suffer from joints pain result from arthritis.
- Alert and agree to participate in the study.

##### **Tools of data collection:**

Two tools were developed and filled by the researchers to collect the data. It included:

**Tool (1): Structured interviewing questionnaire:** It was designed by the researchers based on review of the related literatures, which included the following:

##### **A. Socio-Demographic**

**characteristics:** it included eight questions such as age, sex, residence, marital status, education, occupation, family income and house ventilation.

**B. Clinical data:** - it included ten questions about family history, client's complaints, past and present medical histories of chronic disorders, and medications.

**C. Measures taken by the clients to relieve joints pain, swelling and prevent deformity:** this included 24 questions about using of self-management measures to relieve joints pain, swelling, deformity, stiffness, and fatigue such as keeping active, looking after the joints, try to balance rest with activity, take periods of rest

between work hours, distribute the work along the day, avoid standing for long time, using splint, simple exercises, maintain of body mechanics, having a warm bath and using heated pads to reduce stiffness, using a cold pack to reduce swelling, complementary therapies, and massage.

**D. Measurements:** This included blood pressure, pulse, weight, height and body mass index (BMI). The BMI was estimated by dividing weight in kilogram by squared height in meters [BMI = weight (kg)/height (m)<sup>2</sup> ]

**Tool (2): Affected and non-affected joints pain assessment sheet:** It was constructed by the researchers to record signs and symptoms related to both universal and health deviation requisites of affected and non-affected joints including "pain, and swelling. It included 24 questions about pain and swelling. Also it included questions about site of pain, when pain occurs, the most time for feeling of pain, and assessment for joints swelling and redness.

**Validity and reliability:**

The tools were developed by the researchers after review of the related literature and tested for its content validity. Validity indicated the degree to which the tool measures what it is expected to measure, therefore, in this study, questionnaire content validity was determined by a panel of three experts. Modifications were carried out according to the panel judgment on clarity of the sentences and appropriateness of the contents. Reliability was assessed by applying the questionnaire on 10 clients using test-retest.

**Pilot study:**

Pilot study was conducted on 10% of the sample. This sample was excluded from the total sample. The pilot study was carried out to test the applicability and clarity of the constructed questionnaire and detect any problems that might arise during

the actual collection of data. Then the necessary modifications and clarifications of some questions were done according to the results of the pilot study and final form was developed and used in data collection.

**Field work:**

▪ **Interviewing and assessment phase:** Data collection for this study was carried out from the first of January, 2013 and completed by the end of June, 2013. After obtaining approval and informed consent to conduct the study, data was collected two days per week for six months through interviewing questionnaire with each subject by the researchers individually by using the studied tools. The aim of the study was explained to each subject to give assurance and to gain their maximum cooperation. The average time taken for completing each sheet was around 25- 35 minutes; this was depending on the response of the subject.

▪ **Implementation phase:** The obtained information used as the baseline assessment (pretest), then the total number of the sample was divided into equal groups, each group consisted of 7-10 subjects and instructions were given to them. These instructions included information about self-management measures to relieve joints pain, swelling, redness and stiffness as practice of exercise, hot and cold compresses, position, rest periods, massage, splint, and use of herbal drinks (mixture of ginger and turmeric drink). The researchers gave the packages of ginger and turmeric for each subject and explained the method of preparation (take 1/2 teaspoon each of powdered ginger and turmeric powder instead of root. Brew this in 2 cups of boiling water for about 15 – 30 minutes), times of drinking (in the morning and evening), two cups daily. The researchers explained that drinking will reduce the severity of the joints pain. The teaching methods

included lectures and group discussion. While the teaching media included poster and booklet. At the end of the instructions, each subject was given a guide booklet; this booklet was developed by the researchers after reviewing the related literature and included information, pictures related to self-management measures and home remedy to reduce joints pain, swelling, redness, and stiffness for elderly clients with rheumatoid arthritis.

- Health education topics covered include: 1) techniques to deal with problems such as pain, fatigue, redness, swelling and stiffness 2) appropriate exercises for maintaining and improving muscles strength, and flexibility for joints 3) appropriate use of medications, 4) healthy eating, and 5) measures for getting a good night's sleep.
- **Evaluation phase:** After one month, the researchers were performed posttest by using the same pretest questionnaire.

#### **Administrative and ethical considerations:**

An official permission was obtained from the head of outpatient department and from directors of comprehensive medical center and university hospital. Letters were issued to them from the Faculty of Nursing, Menoufia University explaining the aim of the study in order to obtain permission and help. Oral consent was obtained from the participants who were willing to participate in the study. The participants were informed that participation in this study is voluntary; they can withdraw at any time during the study without giving reasons. The investigators were explained the aim of the study to all elderly clients in the study sample. They reassured that any obtained information would be strictly confidential.

#### **Statistical analysis:**

Data were coded and transformed into a specially designed format suitable for computer feeding. All entered data were verified for any

errors. Data were analyzed using statistical package for social sciences (SPSS) version 20 windows and were presented in tables and graphs. Chi-square analysis was performed and paired t-test was used in comparison between two related groups having quantitative data. Also mean and standard deviations were computed. An alpha level of 0.05 was used to assess significant differences.

#### **Results:**

The study sample included 90 elderly clients from the outpatient clinics in comprehensive medical center and university hospital in Shebin Elkom City, Menoufia Governorate, Egypt, with the mean age was  $66.8 \pm 7.9$ . **Table (1)** shows that, the mean age of the studied sample was  $66.8 \pm 7.9$  and more than two thirds of them were females (68.9%). Regarding to residence, eighty percent of the patients were from rural area, half of them were illiterate (50.0%) and 16.7% of them lived in poor ventilated houses.

**Table (2):** Shows the medical data for the studied sample. Fifty percent of the elderly clients have a family history of arthritis and about two thirds of them (63.3%) have chronic diseases that require regular taking of medications.

**Table (3):** Illustrates that, the home remedies used in the study affected positively on the pulse, systolic and diastolic blood pressure of the clients beside reducing their arthritis pain with statistically significant difference between pre and posttest ( $p < 0.05^*$ ).

**Table (4):** Presents the distribution of pre and post physical functioning changes for the sample. The table showed a significant reduction of joint swelling, joint redness, joint stiffness, feeling of fatigue, and insomnia (23.3%, 13.3%, 40.0%, 76.7%, 66.7%) respectively with statistical significant improvement in the elderly clients condition from pre to post test ( $p < 0.05^*$ ).

**Figure (1):** Reveals that, all elderly clients were suffered from pain during

the pretest, but they improved after using of self-management and home remedy and their pain reduced about 26.7% compared with the pretest. In addition there was a reduction in swelling, redness and stiffness of the affected joints.

**Table (5):** Illustrates that, there was a significant reduction in joints pain for the studied sample from pre to post test ( $p < 0.001$ ). Regarding to self-management measures used by the participants, majority of them felt better with rest (95.1%), splint (71.2%), hot compresses (68.2%) and massage with ointments (68.2%) while fifty nine percent of them preferred the use of warm shower to reduce joints pain. Also 43.3% of them practiced exercises daily to improve their joints health status. Regarding to home remedy, the entire elderly clients felt better with using ginger and turmeric.

**Figure (2):** Shows that, there was a statistical significant reduction of pain from pre to post test for most of the affected joints (hands, elbow, shoulders, neck, hips, knees, feet, and spine) for the studied clients ( $p < 0.05^*$ ).

### Discussion:

Rheumatoid arthritis is a systemic inflammatory disease which manifests itself in multiple joints of the body. Pain, swelling, and redness are common joint manifestations. (27) People with RA have a higher risk of dying than their counterparts in the general population. RA patients are twice more likely to die than people of the same age in the general population. (15) The North American study found a standardized mortality ratio of 2.26 among people with RA compared to the general population. (28)

The optimal management of arthritis requires both non-pharmacological and pharmacological approaches. Rehabilitative interventions are both non-pharmacological and non-surgical treatments used in clinical practice to regain a person's maximum self-

sufficiency and function. They include treatments such as exercise, splints, heat therapy, and massage for relieving pain and improving function. (29)

The aim of the current study was to examine the effect of self-management and home remedy on symptoms of rheumatoid arthritis among elderly clients. Ninety elderly clients included in the study with the mean age  $66.8 \pm 7.9$  years old. Regarding to residence, the present study stated that, eighty percent of the clients were from rural area and more than two thirds of them were females. This may be due to poor housing condition and low income which contributed to poor immunity and susceptibility to different diseases. On the same line, Gabriel et al., Scott, Wolfe & Huizinga and Ismet et al., (30-32) reported that, most of the participants originated from rural areas. Also they stated that, RA is a multifactorial disease that results from interactions between genetic and environmental factors. Contrary to the present study, Lekpa et al., (33) stated that, majority of the arthritis patients in his study were lived in urban areas. This may be due to increased urbanization which lead to different types of pollutions that have an effect on the immune system with specific genetic backgrounds and other environmental factors may lead to the disease.

Regarding to medical data for the studied sample the current study found that, fifty percent of the elderly clients had a family history of arthritis and about two thirds of them had chronic diseases that require regular taking of medications. The results come in accordance with Amy and Wasserman (34) who mentioned that, women, smokers, and those with a family history of the disease are most often affected by RA. Also results from different studies, have shown that heritability definitely contributes to the chances of developing RA. While Scott, Wolfe and Huizing (31) reported that, many cases were believed to

result from an interaction between genetic factors and environmental exposures. More investigations indicate that more than 30 genes studied, the strongest candidate gene is *PTPN22*, a gene that has been linked to several autoimmune conditions.

Symptoms of RA can include joint pain, joint swelling, reduced ability to move the joint, redness and warmth of the skin around a joint, joint stiffness, especially in the morning. The goal of treatment is to reduce pain, improve function, and prevent further joint damage. Physical therapy includes heat, splints, and massage.<sup>(35)</sup> While the Arthritis Foundation,<sup>(36)</sup> focused on self-management as an important part of rheumatoid arthritis care. Managing the weight, eating a nutritious diet and getting a good balance of rest and activity each day are important too. Results of the present study showed a significant reduction of joint swelling, joint redness, duration of joint stiffness, feeling of fatigue, and insomnia with statistical significant improvement in the clients condition from pre to post test ( $p < 0.05^*$ ). Also, the results of the current study revealed that, all clients were suffered from pain during the pretest, but they improved after the use of self-management measures and home remedies and their pain reduced about twenty seven percent compared with the pretest. Also, there was a reduction in swelling, redness and stiffness of the affected joints during the posttest.

Regarding to self-management measures used by the participants, majority of them felt better with rest, splint, hot compresses and massage with ointments while some of them preferred the use of warm shower to reduce joints pain for most of the affected joints (hands, elbow, shoulders, neck, hips, knees, feet, and spine. Also more than forty of them practiced exercises daily to improve their joints health status. This result supported by Mustur et al.,<sup>(9)</sup> who reported that, RA patients showed a

significant improvement in functional condition after completion of twenty eight days of physical treatment. Additionally, Arthritis Research UK,<sup>(37)</sup> stated the importance of simple measures that can help to relieve joint or muscle pain which include a hot-water bottle, a cold-water compress, massage with or without creams that create a sense of warmth, and adequate rest time. These techniques are often helpful after an injury and for sudden flare-ups of arthritis or back pain.

Splints are highly effective in reducing wrist pain after 4 weeks of splint wearing in RA patients with wrist arthritis.<sup>(38)</sup> This supported the results of the current study which stated that, sixty eight percent of the clients were preferred to use splints to reduce the joints pain. Additionally, this result supported by Rannou et al.,<sup>(39)</sup> who found that, a large positive effect of using a night splint on hand pain, function, strength and range of motion.

Massage therapy was shown to be effective in reducing pain in patients with osteoarthritis.<sup>(40)</sup> The present study stated that, more than two thirds of the clients used the massage of joints to reduce pain especially in the morning and afternoon with statistical significant reduction of pain, swelling and stiffness of the joints from pre to post test. A number of studies support the efficacy of massage therapy in treating rheumatoid arthritis. Massage revealed significant improvements across a range of measures compared to usual care.<sup>(41)</sup> A self-massage protocol is helpful in reducing the pain associated with arthritis. It includes stroking, milking, friction and skin rolling.<sup>(42)</sup> It can be done with or without oil or lotion.<sup>(43)</sup> People with arthritis are turning to massage to address both the pain and stiffness of their condition and their general well-being. It should be approached as a complementary therapy.<sup>(44)</sup>

Finally turmeric and ginger are botanically related to each other and have been used for centuries as medicinal herbs. These herbs are

recommended for treating inflammatory conditions. The strong anti-inflammatory properties of ginger are excellent for dealing with arthritic pain.<sup>(23)</sup> The elderly participants in the present research reported a reduction of pain and swelling when they drank ginger and turmeric regularly. The home remedy used in the study affected positively on the pulse, systolic and diastolic blood pressure of the clients beside reducing their arthritis pain with statistically significant difference between pre and posttest( $p < 0.05^*$ ). Ginger and turmeric are effective for easing arthritis pain without significant side effects. So, combination between self-management measures and home remedy like ginger and turmeric are beneficial and effective for reducing arthritis pain and improving the elderly client's physical functioning.

**Conclusion:**

Based on the findings of the present study, it was concluded that after intervention elderly clients who used self-management measures had a significant reduction of rheumatoid arthritis joints pain, swelling, redness, and stiffness. Additionally, home remedy and self-management affected positively on pulse and blood pressure of the clients besides reducing their arthritis pain.

**Recommendations:**

- Encourage RA elderly clients to use the self-management measures such as rest, splint, hot compresses and massage with ointments because it is effective to reduce joints pain.
- Combination between self-management measures and home remedy like ginger and turmeric are beneficial and effective for reducing arthritis pain and improving the clients physical functioning.
- Advises on non-drug management options should be provided to the rheumatoid arthritis elderly clients in the outpatient clinics.

**Table (1): Distribution of Socio-demographic Characteristics for the Studied Sample (n=90)**

Variables	Studied sample n=90	
	No.	%
<b>Age (In years):</b> Mean $\pm$ SD	66.8 $\pm$ 7.9	
<b>Sex:</b>		
▪ Male	28	31.1
▪ Female	62	68.9
<b>Residence:</b>		
▪ Rural	72	80.0
▪ Urban	18	20.0
<b>Education:</b>		
▪ Illiterate	45	50.0
▪ Primary	21	23.3
▪ Secondary	18	20.0
▪ University	6	6.7
<b>Occupation :</b>	24	26.7
▪ Work		
▪ Not work:	66	73.3
<b>Marital status:</b>		
▪ Single	3	3.3
▪ Married	63	70.0
▪ Divorced	3	3.3
▪ Widowed	21	23.4
<b>Income :</b>		
▪ Enough	48	53.3
▪ Enough for the needs only	39	43.4
▪ Not enough	3	3.3
<b>House ventilation</b>		
▪ poor	15	16.7
▪ Good	75	83.3

**Table (2): Distribution of Medical Data for the Studied Sample (n=90)**

Medical data	No.	%		
▪ Family history	45	50.0		
▪ Chronic diseases	57	63.3		
▪ Medication use:	72	80.0		
	<b>Range</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean <math>\pm</math> SD</b>
▪ Medication number	4.00	1.00	5.00	2.4167 $\pm$ 1.04
▪ Gastric problems due to medications	42	46.7		

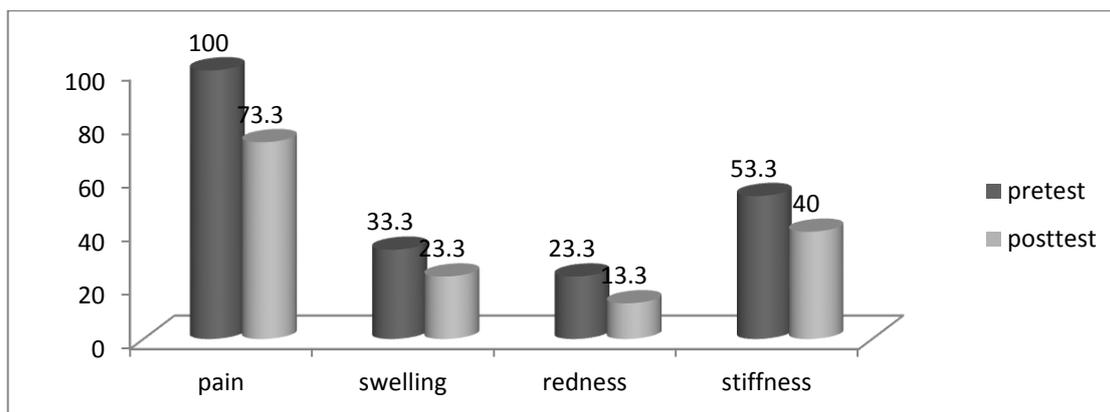
**Table (3): Comparison between Pre and Post Measurements for Weight, Pulse, Systolic and Diastolic Blood Pressure for the Studied Sample**

Measurements	Pre	Post	p-value	
▪ <b>Weight</b>	73.3 ± 10.8	72.7± 10.9	t=4.5	p< 0.05*
▪ <b>BMI</b>	29.09 ± 3.8	28.9 ± 3.5	t=0.8	p> 0.05
▪ <b>Pulse</b>	82.4± 9.13	81.1 ± 8.4	t=1.9	p< 0.05*
▪ <b>Systole</b>	130 ± 11.8	128 ±10.5	t=2.26	p< 0.05*
▪ <b>Diastole</b>	83 ± 9.05	81.5 ±7.1	t=1.96	p< 0.05*

\* Statistically significant at  $p \leq 0.05$

**Table (4): Percentage Distribution for Physical Functioning Changes (swelling, redness, stiffness, fatigue & walking difficulties) for the Studied Sample during Pre and Post-test**

Physical functioning changes	Pre	post	P value
<b>Joint swelling</b>	33.3	23.3	p<0.05*
<b>Joint redness</b>	23.3	13.3	p<0.001*
<b>Joint stiffness</b>	53.3	40.0	
	<b>N=48</b>	<b>N=36</b>	
▪ Along the day	6.2	16.7	p>0.05
▪ Sometimes	93.8	83.3	
<b>Duration of stiffness</b>			
▪ 5-10 min	31.3	66.7	
▪ 10-15min	62.5	33.3	
▪ 15-30 min	6.2	0.0	
<b>Feeling of fatigue</b>	96.7	76.7	
	<b>N=87</b>	<b>N=69</b>	
▪ Mild	13.8	8.7	p<0.001
▪ Moderate	58.6	78.3	
▪ Severe	27.6	13.0	
<b>Walking difficulties</b>	16.7	13.3	p>0.05
<b>Insomnia</b>	80.0	66.7	
	<b>N=72</b>	<b>N=60</b>	
<b>Cause:</b>	79.2	75.0	p<0.001
▪ Joint pain	12.5	20.0	
▪ Stress	4.2	0.0	
▪ To go to bathroom	4.2	5.0	
▪ More than cause			
<b>Methods of management:</b>	37.5	80.0	
▪ Warm bath	20.8	10.0	
▪ Sedative	41.7	10.0	
▪ No action			

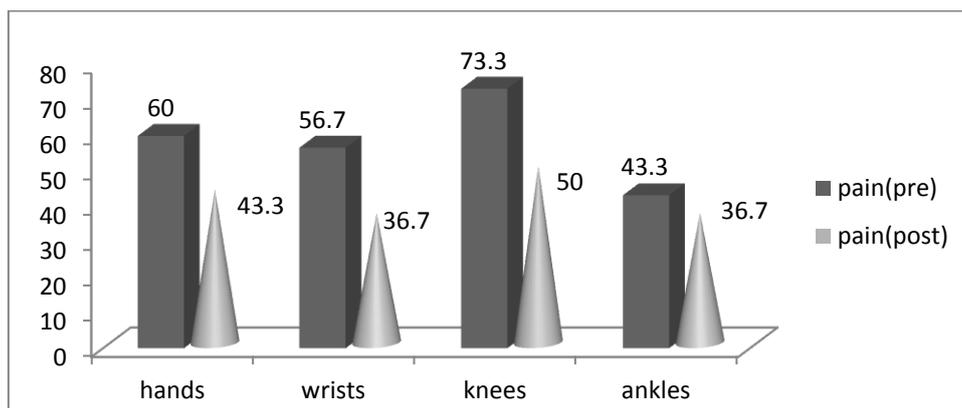


**Figure (1): Percentage Distribution for Pain and Physical Functioning Changes during Pre and Post-test**

**Table (5): Comparison between Pre and Post Changes in the Joints Pain and Self-Management Measures for the Studied Sample (n=90)**

Joints pain	Pre	post	P value
▪ Pain	90	66	p<0.001*
▪ Occur with effort	100.0	73.3	
▪ Occur without effort	N=90	N=66	
	70.0	31.8	
<b>Time of pain</b>			p<0.001*
▪ Morning	30.0	68.2	
▪ Afternoon	6.7	9.0	
▪ At night	60.0	45.5	
▪ All the day	10.0	45.5	
<b>Self - management measures to reduce pain:</b>			p< 0.001*
▪ Hot compresses		23.3	
▪ Warm shower		0.0	
▪ Cold compresses		68.2	
▪ Rest		59.1	
▪ Massage with ointment		36.4	
▪ Splint		95.1	
▪ <b>Practice exercises at home :</b>		68.2	
➤ Yes	31.1	70.0	
➤ No	68.9	30.0	
<b>Practice it Daily</b>			p< 0.001*
➤ Yes	13.3	43.3	
➤ No	86.7	56.7	
<b>Why not practice exercises:-</b>	N= 62	N=27	p< 0.001*
➤ lack of knowledge	53.2	11.1	
➤ do not know its benefits	32.3	11.1	
➤ pain	14.5	77.8	
<b>Home remedies: Ginger and turmeric</b>	0.0	100.0	

\* Statistically significant at  $p \leq 0.001$



**Figure (2): Comparison between Pre and Post Assessment of Pain at Different Joints**

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## تأثير الرعاية الذاتية و العلاج المنزلي علي أعراض التهاب المفاصل الروماتويدي بين كبار السن

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### مقدمة :

التهاب المفاصل الروماتويدي هو التهاب مزمن يؤثر على مفاصل الجسم و يسبب عينا كبيرا على الفرد و المجتمع بسبب الطابع المزمن لهذه الحالة. لذلك فمن المهم تقديم دورات تدريبية عن الرعاية الذاتية التي تعلم المرضى المسنين تقنيات التعايش بشكل إيجابي مع المرض مثل الحفاظ على النشاط و رعاية المفاصل واستخدام الكمادات الساخنة و الباردة و العلاج التكميلي والتدليك.

التهاب المفاصل الروماتويدي هو التهاب مزمن يؤثر على مفاصل الجسم و يسبب عينا كبيرا على الفرد و المجتمع بسبب الطابع المزمن لهذه الحالة. لذلك فمن المهم تقديم دورات تدريبية عن الرعاية الذاتية التي تعلم المرضى المسنين تقنيات التعايش بشكل إيجابي مع المرض مثل الحفاظ على النشاط و رعاية المفاصل واستخدام الكمادات الساخنة و الباردة و العلاج التكميلي والتدليك.

### الهدف من الدراسة:

هدفت الدراسة الحالية إلى دراسة تأثير الرعاية الذاتية و العلاج المنزلي على الأعراض المصاحبة لالتهاب المفاصل الروماتويدي بين كبار السن.

### التصميم البحثي:

تم استخدام تصميم شبه تجريبي.

### مكان الدراسة:

أجريت الدراسة في العيادات الخارجية للمركز الطبي الشامل و المستشفى الجامعي بشبين الكوم محافظة المنوفية.

### عينة الدراسة:

أجريت الدراسة على ٩٠ من كبار السن المصابين بمرض التهاب المفاصل الروماتويدي.

### أدوات جمع البيانات:

تم استخدام استمارتين استبيان:

١. استبيان لجمع المعلومات الديموجرافية
٢. واستمارة تقييم الألم بالنسبة للمفاصل التي تأثرت و التي لم تتأثر بالمرض.

### النتائج:

كان متوسط عمر المشاركين  $76.8 \pm 7.9$  سنة. كما أن خمسين بالمائة من المرضى كان لديهم تاريخ عائلي لالتهاب المفاصل. و قد حدث تحسن في حالة المرضى أثناء الاختبار البعدي مع انخفاض كبير في نسبة تورم المفاصل، الإحمرار، ومدة تصلب المفاصل، والشعور بالتعب، والأرق. وفيما يتعلق بتدابير الرعاية الذاتية المستخدمة من قبل المشاركين، فإن معظمهم شعر بتحسن مع الراحة، واستخدام الجبيرة و الكمادات الساخنة والتدليك بالمراهم. كما أن العلاج المنزلي المستخدم في الدراسة (الكرم و الزنجبيل) أثر إيجابيا على

### الخلاصة:

وبناء على نتائج هذه الدراسة، تم التوصل إلى أنه المرضى الذين نفذوا تدابير الرعاية الذاتية كان لديهم انخفاض ملحوظ في الألم ، التورم، الإحمرار، ومدة تصلب المفاصل المصاحبة لالتهاب المفاصل الروماتويدي. بالإضافة إلى ذلك، كان للعلاج المنزلي أثر إيجابيا على النبض، وضغط الدم الانقباضي والانبساطي إلى جانب الحد من الألم و التورم في المفاصل .

### التوصيات:

تشجيع المرضى المسنين على استخدام تدابير الرعاية الذاتية إلى جانب استخدام العلاج المنزلي مثل الزنجبيل والكرم فهي مفيدة وفعالة للحد من آلام التهاب المفاصل وتحسين حالة المريض.