Quality of life of women with rheumatoid arthritis

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Abstract

Background: Rheumatoid arthritis is asystemic inflammatory autoimmune disease that has great effect on patients' quality of life. **Aim of the study** the study aims to assess quality of life of women with rheumatoid arthritis through:-Assessing knowledge of women about rheumatoid arthritis, Assessing physical ability, psycological, emotional, occupational function of women with rheumatoid arthritis. **Research design:** A descriptive research design was utilized. **Setting:** The study was conducted in physical medicine, rheumatology, and rehabilitation department Tanta university hospitals. **Sample:** A purposive sample that included 350 women that were diagnosed with rheumatoid arthritis. **Data collection tools: One data collection tool was used to carry out the current study namely: Interviewing questionnaire sheet.** The study tool consists of five parts; demographic data, women's health history, women's life style factors, woman's knowledge, and Physical quality of life. **Results:** Nearly three quarter of women with arthritis had correct and complete knowledge, more than two third of women with arthritis had unsatisfactory total knowledge, more than half of women with arthritis had poor total psychological state, nearly half of women with arthritis had poor total physical conditions, nearly half of women with arthritis had poor total quality of life. **Conclusions:** This study concluded that More than two third of women with arthritis had unsatisfactory total knowledge. More than half of women with arthritis had poor total psychological state. Less than half of women with arthritis had poor total physical and occupational conditions, and less than half of women with arthritis had poor total quality of life. There was highly statistically significant correlation between total knowledge with psychological, physical, social and total QOL. **Recommendations:** Provide educational programs to Increase women's knowledge regarding rheumatoid arthritis. Priority should be given to increase women's awareness regarding rheumatoid arthritis. Providing emotional and social support for women with rheumatoid arthritis.

Keywords: Quality of life, women, rheumatoid arthritis.

Introduction

Millions of people suffering from musculoskeletal problems, up to one million have a rheumatic condition, including approximately 690,000 adults with rheumatoid arthritis. Rheumatoid arthritis is the most common autoimmune inflammatory arthritis in adults. Women are two to three times more likely to be diagnosed with rheumatoid arthritis, and around three-quarters of patients were first diagnosed at working age. The cause of rheumatoid arthritis is not known. Susceptible patient groups: Female > male, Smokers, Anti-cyclic citrullinated peptide (anti-CCP)/rheumatoid factor (RF) positivity, and Peak age 50–75 years (**Helmick, 2018).**

Rheumatoid arthritis (RA) is a chronic, symmetrical, inflammatory autoimmune disease that initially affects small joints, progressing to larger joints, and eventually the skin, eyes, heart, kidneys, and lungs. Often, the bone and cartilage of joints are destroyed, and tendons and ligaments weaken. All this damage to the joints causes deformities and bone erosion, usually very painful for a patient. Common symptoms of RA include morning stiffness of the affected joints for > 30 min, fatigue, fever, and weight loss, joints that are

tender, swollen and warm, and rheumatoid nodules under the skin (**National Audit Office, 2019).**

American College of Rheumatology (ACR)/European League Against Rheumatism (EULAR) developed classification criteria, which can help a physician-made diagnosis. The criteria attribute points based on the number of tender or swollen joints. There has to be at least one joint with clinical sinusitis. Laboratory tests are included: RF, anti-CCP antibody and acute phase reactants. However, antibody positivity and elevated acute phase reactants are not essential to make the diagnosis **(National Rheumatoid Arthritis Society, 2017).**

The goals of treatment for RA are to reduce joint inflammation and pain, maximize joint function, and prevent joint destruction and deformity. Treatment regimens consist of combinations of pharmaceuticals, weight bearing exercise, educating patients about the disease, and rest. Treatments are generally customized to a patient. Early recognition of symptoms and diagnosis is key to a more successful patient outcome **(Karlson, 2017).**

The diagnosis of rheumatoid arthritis can be made with normal auto antibodies/inflammatory markers. Primary care physicians should not wait for investigation results prior to referral if rheumatoid arthritis is suspected. Early referral to a specialist rheumatology clinic has been associated with better results. The management of rheumatoid arthritis include: Primary care, and Multidisciplinary care (**National Institute for Health and Care Excellence, 2020).**

Primary care: When patients present with joint symptoms suggestive of inflammatory arthritis, initial treatment by primary care should focus on analgesia. This can include paracetamol, codeine or compound analgesics. Standard NSAIDs or selective COX-2 inhibitors are also options in primary care. Corticosteroids should only be initiated in secondary care after review **(Aletaha, 2017).**

Multidisciplinary care: The management of rheumatoid arthritis involves a multidisciplinary approach through a rheumatology clinic (occupational therapy, physiotherapy, psychology and patient support) along with patient education. The following professionals may be involved in the care of patients with rheumatoid arthritis as part of the multidisciplinary team: Occupational therapist – Help with everyday activities; splints, wrist supports, pacing advice. Physiotherapist – Specific muscle/joint functioning, eccentric concentric exercise programmers. GP – Assessment and management of co-morbidities including: cardiovascular risk and consideration of bone health (**Anderson, 2016).**

Symptoms arising from the disease imply joint deformities and functional disability, which can lead individuals to functional dependence and limitations of their daily living activities. The more advanced the disease stage, the shorter the survival becomes8. Pain and inflammation associated with musculoskeletal disorders are the main factors responsible for the impact on the subject's quality of life (QOL), both in physical aspects and in mental aspects **(Saag, 2018).**

Physical conditions presented imply the need to develop strategies for RA treatment. Currently, several methods allow a satisfactory disease's handling. Among these, physiotherapy, especially kinesiotherapy, becomes a beneficial and viable strategy, aiming to relieve pain and combat inflammatory processes, to allow restoring particular movement amplitude and muscle activity, preventing new deformities onset, promoting physical, psychic and social well-being and, consequently, improving patients' QOL (**Chakravarty, 2018).**

Nurses in the community help patients with RA achieve the ultimate goal of remission or low disease activity. Based on the patient's individual needs, encourage and assist him or her to establish health behaviors and activities that promote rest and exercise, reduce stress,

and encourage independence (**Fox, 2017).** Nurses play a vital role in helping people with rheumatoid arthritis. RA is a chronic lifelong irreversible condition; nurses often are involved in the management of this condition. One of the most vital roles of the nurse is to develop a good rapport with those suffering from this condition. RA is a condition that can be painful, disfiguring, and greatly inhibit regular activities of daily living. Medications can be expensive and the rate of depression in these sufferers can be high **(Weisman, & Rinaldi, 2019).**

Patients often have to be monitored on a regular basis due to the high-risk medications that can be used in the management of RA. Due to an increase in reimbursement cuts to providers as well as an increase in baby boomers and chronic conditions, providers are often faced with seeing more patients in less time in order to survive. Therefore, education of the disease process and management plan with crucial continued reinforcement is an ever increasing role of the nurse **(Furst, 2017).**

The nurse is in the best position to monitor for depression, progression of illness, medication side effects, adherence to management plan, support system. Nurses who work with a wide variety of different conditions it can be difficult to keep abreast of changes in all medical fields. However, there are a large number of useful resources that are easily available, and organizations that provide resources and support to professionals and patients. Although the above list is by no means definitive, it does provide links to a wide range of resources **(Malaviya, 2017).** In the case of inflammatory or rheumatoid arthritis, the local rheumatology department can provide further information, both generally and on the management of specific patients. Contact via the RNS advice line for assistance and information on any of the rheumatologic conditions is a vital resource for use by community nurses in caring for their patients. Local training days can be arranged with the local rheumatology department to help increase knowledge and skills. Improving knowledge and communication about each other's roles, as well as best practice in caring for patients with rheumatologic conditions, is move that can only benefit the patients **(Solau-Gervais, 2016).**

Rheumatoid arthritis is a chronic and progressive inflammatory musculoskeletal disease that cause significant term disability. Rheumatoid arthritis affects approximately 1.3 million people in the united states, A affect approximately 2.1 million americans,2.5% in south Africa,1.3% in Egypt. RA is a progressive disease, causing various potentially serious complication that can affect other organs such as the heart, lungs, and nerves and could cause long term disability **(Kramer,2015).**

The health-related quality of life in rheumatoid arthritis, impact of disability and life time, increase the risks for developing a variety of health conditions. So that the nurse needs to be alert and has sufficient knowledge, instructions, treatment, regarding such problem.

Aim of the study

The aim of this study is to assess quality of life of women with rheumatoid arthritis through:

1- Assessing knowledge of women about rheumatoid arthritis.

2-Assessing physical ability, psychological, emotional, and occupational function of women with rheumatoid arthritis.

Subjects and Methods

Research design:

A descriptive exploratory research design was used in carrying out the current study.

Setting:

The current study was conducted in physical medicine, rheumatology, and rehabilitation department Tanta university hospitals. .

Subjects:

A purposive sample that included 350 women that were diagnosed with rheumatoid arthritis

Data collection tools:

One data collection tool was used to carry out the current study namely; Interviewing questionnaire sheet

An Interviewing Questionnaire sheet;

An interview sheet was developed by investigator in order to collect the necessary data; it was include five parts as follows:

Part 1: Demographic Data related to women's age, education, occupation, family income and number of family members.

Part 2: women's health history this was include: - reproductive history as age of menarche, number of pregnancies, number of delivers, use of contraceptives, age at menopause.

- Medical history such as history of chronic liver diseases, chronic renal disorders, hyperthyroidism, osteoporosis.
- History of drug use as anticonvulsants, anticoagulants, thyroid hormones.
- Family history for rheumatoid arthritis.

Part 3: women's life style factors include: Physical activity this includes pattern, frequency, and duration of weight bearing physical activity as walking, standing back bend climbing descending stairs or other physical exercises (**Rao, et al., 2018).** Smoking habit passive or active. Dietary habits as the amount and frequency of calcium, vitamin d, intake of protein, salt in diet, consumption of coffee, tea, cola **(Sharma, et al., 2018).**

Part 4: woman's knowledge about rheumatoid arthritis:-including meaning, major bones affected, sex vulnerability, risk factors, symptoms, preventive practice, methods for early diagnosis of RA.

Part 5: a- Physical quality of life related to rheumatoid arthritis (**Nakagami, et al., 2018).** b- Social quality of life related to rheumatoid arthritis **(Rehabil .D, 2016**). c- Physiological quality of life related to rheumatoid arthritis (**John, et al., 2019).** d- Emotional quality of life related to rheumatoid arthritis **(Ziarko, et al., 2019).**

Tools validity:

Face and content validity of the study tools was assessed by jury group consisted of three experts (Professors) in community nursing from different faculties of nursing. Jury group members judge tools for comprehensiveness, accuracy and clarity in language. Based on their recommendations correction, addition and / or omission of some items were done.

Tools Reliability:

The study tool was tested for its internal consistency by Cronbach's Alpha. It was 0.783 for the Interviewing questionnaire sheet.

Fieldwork:

Data collection of the study was started at the beginning of January 2019, and completed by the end of March 2019. The researcher attended at physical medicine, rheumatology and rehabilitation department Tanta university hospitals three days per week from 9am to 2pm for all patients have rheumatoid arthritis composed of 350 women that were diagnosed with rheumatoid arthritis. The researcher first explained the aim of the study to the patients and reassures them that information collected will be treated confidentiality and that it will be used only for the purpose of the research.

Administrative Design:

An official letter requesting permission to conduct the study was directed from the dean of the faculty of nursing Ain Shams University to physical medicine, rheumatology and rehabilitation department Tanta university hospitals to obtain their approval to carry out this study. This letter included the aim the study and photocopy from data collection tools in order to get their permission and help for collection of data.

Ethical Considerations:

Prior study conduction, ethical approval was obtained from the scientific research ethical committee of the faculty of nursing, Ain Shams University. The researcher met director of physical medicine, rheumatology and rehabilitation department Tanta university hospitals to clarify the aim of the study and take their approval. The researcher also met the patients to explain the purpose of the study and obtain their approval to participate in the study. They were reassured about the anonymity and confidentiality of the collected data, which was used only for the purpose of scientific research. The subjects' right to withdraw from the study at any time was assured.

Statistical analysis:

The collected data were coded and entered into the statistical package for the social science (SPSS 23.0). Data was presented and suitable analysis was done according to the type of data obtained for each parameter. Data were presented using descriptive statistics in the form of frequencies and percentages for categorical variables, and means and standard deviations for continuous quantitative variables. Qualitative categorical variables were compared using Chi-square (X^2) test but when the expected count is less than 5 in more than 20% of the cells; Fisher's Exact Test was used. Person and spearman correlation was used to examine the correlation between quantitative and qualitative variables. Statistical significance was considered when P-value < 0.05.

Results:

Table (1): shows that nearly one third (31.71%) of women with arthritis were aged from 35-<45 years, more than half (55.71 %) of women with arthritis were read and write in Education level. Also, majority (95.14%) of women with arthritis were not work, more than half (58.86 %) of women with arthritis were married. Regarding the family income, majority (92+%) of the women with arthritis had not enough., more than half (52.60 %) of women with arthritis had from 4 to 5 of number of family.

Table (2): shows that more than one third (35.66 %) of women with arthritis had two pregnancy times, nearly two fifth (37.06) of them had two number of births. Majority (90.31%) of women with arthritis wasn't use hormone therapy after menopause and Majority (97.58%) of them were used contraceptives. Regarding the infected or complain of one of the following diseases, majority (93.71 %) of the women with arthritis had rheumatism in the joints. Also, majority (96.29%) of women with arthritis take Cortisone as a medication, and nearly two third (61.9%) of women's family had rheumatism in the joints.

Table (3): shows that majority (99.14%) of women with arthritis were not do any sports or exercise, more than half (56.29 %) of them was sometimes exposed to the sun for women with arthritis. More than half (50.57%) of women with arthritis weren't smoke. Nearly two third (64.86 %) of women with arthritis was prefer eating food with average sugar, nearly three quarter (74.86%) of women with arthritis were not eat a lot of sweet. Majority (82.57%) of women with arthritis were not eat meat or (sheep - beef - calf - camel) weekly, Majority (83.14%) of women with arthritis hadn't a diet to lose weight. Majority (96.86%) of them were not drink coffee. More than two third (70.86%) of them were not drink Pepsi Cola or Coca-Cola

Table (4a&b): shows that nearly three quarter (74%) of women with arthritis had correct and complete knowledge on "what is the source of your information about rheumatoid". More than two third (67.4%) of women with arthritis had correct and complete knowledge on "Is there a treatment for rheumatoid". More than half of women with arthritis had correct and complete knowledge on the following items: " What are the most susceptible bones to rheumatoid disease", " What is home treatment", and " What is arthritis" (57.1%, 54%, and 53.1% respectively)..

Table (5): shows that nearly half (46.9%) of women with arthritis had poor total quality of life (QOL) Also, more than one fifth (20.6%) of women with arthritis had good total quality of life (QOL).

Table (6): shows that there were highly statistically significant correlation between Total knowledge with psychological, physical, Social and total QOL.

Table (1): Demographic characteristics of rheumatoid arthritis women (N=350).

		N	%
Age (years)			
	25-<35	87	24.8
	35-<45	111	31.7
	45-<55	97	27.7
	55 or more	55	15.8
	Mean±SD	42.86±10.44	
Education			
	Uneducated	109	31.1
	read and write	195	55.8
	Primary	6	1.7
	Preparatory	10	2.8
	Secondary	17	4.9
	University	13	3.7
Work			
	Work	17	4.9
	Not work	333	95.1
Marital Status			
	Married	206	58.9
	Unmarried	61	17.4
	Divorced	35	10
	Widowed	48	13.7
Family income			
	Enough	28	8
	Not enough	322	92
Number of family			
	2-3	45	12.9
	4-5	152	43.4
	5-6	88	25.1
	More	65	18.6

Table (2): Distribution of the studied subjects according to their Health History (n=350).

	N	%
How long is the marriage		
Mean±SD	18.83±8.84	
Number of pregnancy times		
Once	35	12.24
Two	102	35.66
Three	90	31.47
Four	55	19.23
More	4	1.40
Number of births		
Once	33	11.54
Two	106	37.06
Three	90	31.47
Four	53	18.53
More	4	1.40
Your age at the first monthly session		
Mean±SD	1.+9313.77±1.75	
Your age at menopause (if you have reached this stage)		
Mean±SD	52.79±5.49	
Did you use hormone therapy after menopause		
Yes	28	9.69
No	261	90.31
Have you used contraceptives		
Yes	282	97.58
No	7	2.42
Are you infected or complain of one of the following diseases		
Rheumatism in the joints	328	93.71
Osteoporosis	14	4.00
Chronic liver disease	3	0.86
Chronic kidney disease	1	0.29
An increase in thyroid secretions	4	1.14
Do you take any of the following medicines		
Cortisone	337	96.29
Thyroid hormone	12	3.43
Antiepileptic and anti-seizure medication	1	0.29
Does anyone in your family have any of the following diseases		
Rheumatism in the joints	52	61.90
Osteoporosis	32	38.10

Table (3): Distribution of the studied subjects according to their Physical activity (n=350).

	N	%
Do you practice any sports or exercise		
Yes	3	0.86
No	347	99.14
If yes: What kind of exercise or exercises		
Walking regularly outside the house	1	33.33
Going up and down stairs	2	66.67
The number of practice times per week		
Mean±SD	4±5.2	
The duration of the exercise in one time		
Mean±SD	3.67±1.5	
Are you exposed to the sun		
not exposed	115	32.86
exposed sometimes	197	56.29
exposed daily to the sun	38	10.86
Do you smoke		
Yes	3	0.86
No	177	50.57
I am with my husband or father while smoking	170	48.57
How do you prefer eating your food		
High sugar	56	16.00
Average sugar	227	64.86
Without sugar	67	19.14
Do you eat a lot of sweets		
Yes	88	25.14
No	262	74.86
Do you eat meat or (sheep - beef - calf - camel) weekly		
Yes	59	16.86
No	289	82.57
I am with my husband or father while smoking	2	0.57
Have you ever had a diet to lose weight		
Yes	59	16.86
No	291	83.14
Do you drink coffee		
Yes	11	3.14
No	339	96.86
Do you drink Pepsi Cola or Coca-Cola		
Yes	102	29.14
No	248	70.86

Table (4a): Distribution of the studied subjects according to their knowledge (n=350).

	Knowledge	Correct and complete		Correct and incomplete		Incorrect		Mean
		N	%	N	%	N	%	
1.	What is arthritis	186	53.1	18	5.1	146	41.7	1.11
2.	What are the most susceptible bones to rheumatoid disease	200	57.1	15	4.3	135	38.6	1.19
3.	Who is most vulnerable to the disease	108	30.9	31	8.9	211	60.3	0.71
4.	Does the disease lead to joint deformities	113	32.3	78	22.3	159	45.4	0.87
5.	Does the disease lead to movement deficits	104	29.7	61	17.4	185	52.9	0.77
6.	Does the disease affect other parts of the body other than the joints	84	24.0	57	16.3	209	59.7	0.64
7.	Is it a genetic disease	65	18.6	79	22.6	206	58.9	0.6
8.	Is it an infectious disease	94	26.9	70	20.0	186	53.1	0.74
9.	Is it a chronic disease	112	32.0	76	21.7	162	46.3	0.86
10.	Is it an aging disease	102	29.1	47	13.4	201	57.4	0.72
11.	Is exposure to cold one of the factors leading to the disease	93	26.6	63	18.0	194	55.4	0.71
12.	Does the quality of food have anything to do with getting sick	67	19.1	44	12.6	239	68.3	0.51
13.	Is obesity one of the factors leading to the disease	82	23.4	49	14.0	219	62.6	0.61
14.	Is smoking a factor in the disease	69	19.7	56	16.0	225	64.3	0.55

Table (4b): Distribution of the studied subjects according to their knowledge (n=350).

	Knowledge	Correct and complete		Correct and incomplete		Incorrect		Mean
		N	%	N	%	N	%	
1.	Who is the doctor specialized in the diagnosis and treatment of rheumatoid arthritis	123	35.1	96	27.4	131	37.4	0.98
2.	What are the factors that help the occurrence of rheumatoid disease	75	21.4	63	18.0	212	60.6	0.61
3.	What are the symptoms of rheumatoid disease	142	40.6	106	30.3	102	29.1	1.11
4.	From the methods that help diagnose rheumatoid	116	33.1	132	37.7	102	29.1	1.04
5.	Can arthritis be prevented	91	26.0	47	13.4	212	60.6	0.65
6.	If the answer is yes, what are the methods that help to prevent rheumatoid disease	93	26.6	37	10.6	91	26.0	1.01
7.	Do non-traditional treatments such as herbal ginger and bee venom have a role in treating rheumatoid	107	30.6	40	11.4	203	58.0	0.73
8.	Is there a treatment for rheumatoid	236	67.4	41	11.7	73	20.9	1.47
9.	Does rheumatoid need permanent treatment	8	2.3	325	92.9	17	4.9	0.97
10.	What is rheumatoid treatment	147	42.0	141	40.3	62	17.7	1.24
11.	What is surgical treatment	142	40.6	153	43.7	55	15.7	1.25
12.	What is home treatment	191	54.6	122	34.9	37	10.6	1.44
13.	What is the source of your information about rheumatoid	259	74.0	91	26.0	0	0.0	1.74

Table (5): Level of Total QOL among studied subjects (n=350).

Total QOL	N	%
Good	72	20.57
Average	114	32.57
Poor	164	46.86
Total	350	100
Range	7-34	
Mean±SD	21.45±5.7	

Table (6): Correlation between Total knowledge with psychological, physical, Social and total QOL (n=350).

	Total knowledge	
	r	P-value
Total psychological	0.564	<0.001**
Total physical	0.488	<0.001**
Total Social	0.845	<0.001**
Total QOL	0.623	<0.001**

Discussion:

Rheumatoid arthritis (RA) is a chronic, symmetrical, inflammatory autoimmune disease that initially affects small joints, progressing to larger joints, and eventually the skin, eyes, heart, kidneys, and lungs. Often, the bone and cartilage of joints are destroyed, and tendons and ligaments weaken. All this damage to the joints causes deformities and bone erosion, usually very painful for a patient **(Chaudhari, Rizvi, & Syed, 2018).**

Quality Of Life (QOL) can be measured in various ways, and several generic and RA-specific questionnaires have been used.4–6 Patients with RA report reduced QOL in several domains, such as physical health, level of independence, environment and personal beliefs, compared with the healthy population. QOL in RA is affected by fatigue, pain, stiffness and impaired physical functioning. In addition, QOL is also influenced by socioeconomic factors such as age, employment, economic status and lifestyle habits (**Williams, et al., 2017).**

So the current study aimed to assess quality of life of women with rheumatoid arthritis through: Assessing knowledge of women about rheumatoid arthritis, and Assessing physical ability, psychological, emotional, occupational function of women with rheumatoid arthritis.

Regarding the demographic characteristics of the studied women, the current study revealed that, nearly one third of the studied women had from 35 to 45 years old, more than half of them able to read and write, majority of them were not working. More than half of the studied women were married and had not enough income, more than half of them had 4”5 family members.

This study is in agreement with **Verket, et al., (2018)** who conducted entitled “Health related quality of life in women with endometriosis, compared with the general population and women with rheumatoid arthritis” found that majority of women able to read and write, majority of them were not working. More than half of the studied women were married. This study is in agreement with **Moosavian, Paknahad, & Habibagahi, (2020)** who conducted entitled “A randomized, double blind, placebo controlled clinical trial, evaluating the garlic supplement effects on some serum biomarkers of oxidative stress, and quality of life in women with rheumatoid arthritis” found that majority of the women were married and had not enough income, more than half of them had 3-4 family members

Regarding the health history of the studied women, the current study revealed that, more than one third of the studied women had two times previous pregnancy, majority of them used contraceptives and didn’t use hormone therapy after menopause. Majority of the studied women had rheumatism in the joints and use cortisone therapy. More than half of their families had rheumatism in the joints.

This study is in agreement with **García-Morales, et al., (2019)** who conducted entitled “Effect of health history in Women With Rheumatoid Arthritis” found that majority of women used contraceptives and didn’t use hormone therapy after menopause. Majority of the women had rheumatism in the joints and use cortisone therapy. This study is in disagreement with

Egorova, Nikitina, & Rebrov, (2019) who conducted entitled "QUALITY OF LIFE IN WOMEN WITH RHEUMATOID ARTHRITIS DEPENDING ON HEALTH HISTORY" found that majority of their families hadn't rheumatism in the joints.

Regarding the physical activity of the studied women, the current study revealed that, majority of women with arthritis was use hormone therapy after menopause and used contraceptives. This study is in agreement with **Schnornberger, Jorge, & Wibelinger, (2017)** who conducted entitled "Physiotherapeutic intervention in pain and quality of life of women with rheumatoid arthritis" found that majority of women with arthritis was use hormone therapy after menopause and used contraceptives. This study is in disagreement with **Skorpen, et al., (2018)** who conducted entitled "Quality of life may influence on the ability to achieve pregnancy in women with systemic lupus erythematosus and women with rheumatoid arthritis" found that majority of women with arthritis wasn't use hormone therapy after menopause and used contraceptives

Regarding the infected or complain of one of the following diseases, the current study revealed that, majority of the women with arthritis had Rheumatism in the joints. Also the women with arthritis take Cortisone was with present. This study is in agreement with **Kopciuch, et al., (2016)** who conducted entitled "Effect of therapy with anti-TNF α drugs and DMARD on disease activity and health related quality of life among women with rheumatoid arthritis" found that majority of the women with arthritis had Rheumatism in the joints.

This study is in agreement with **Alemao, et al., (2016)** who conducted entitled "Effects of achieving target measures in rheumatoid arthritis on functional status, quality of life, and resource utilization: analysis of clinical practice data. Arthritis care & research" found that majority of the women with arthritis take Cortisone.

Regarding Distribution of the studied subjects according to their Physical activity, the current study revealed that, majority of women were not do any sports or exercise of women with arthritis, more than half was sometimes exposed to the sun for women with arthritis. Two third of women was prefer eating your food with Average sugar. From the research point of review, this may be due to women had severe pain in their joints thus women can't exercise any sports.

This study is in agreement with **Krasselt, & Baerwald, (2019)** who conducted entitled "Sex, symptom severity, and quality of life in rheumatology" found that majority of women were not do any sports or exercise of women with arthritis. This study is in agreement with **Zhang, et al., (2017)** who conducted entitled "The correlations of socioeconomic status, disease activity, quality of life, and depression/anxiety in patients with rheumatoid arthritis" found that third of women was prefer eating your food with Average sugar.

Regarding the smoking, the current study revealed that, half of the women with arthritis were set with her husband or father while smoking. Also minority the women with arthritis had a diet to lose weight with present. From the research point of review, this may be due to women were live with their husband. This study is in agreement with **Wan, et al., (2016)** who conducted entitled "Health-related quality of life and its predictors among patients with rheumatoid arthritis" found that majority of the women with arthritis were set with her husband or father while smoking.

This study is in agreement with **Gautam, et al., (2019)** who conducted entitled "Impact of smoking based lifestyle intervention on quality of life, depression and sperm" found that majority of participants were live with their husbands that smokers.

Regarding distribution of the studied subjects according to their knowledge, the current study revealed that, three quarter of women in source of your information about rheumatoid, two third in treatment for rheumatoid with also than half the most susceptible bones to

rheumatoid disease and meaning of arthritis. From the research point of review, this may be due to women were more interested about knowledge of rheumatoid arthritis.

Regarding correlation between Total knowledge with psychological, physical, Social and total QOL, the current study revealed that highly statistically significant deference between Total knowledge with psychological, physical, Social and total QOL

This study is in agreement with Ataoğlu, et al., (2018) who conducted entitled "Quality of life in fibromyalgia, osteoarthritis and rheumatoid arthritis patients: Comparison of different scales" found that a statistically significant deference between Total knowledge with rheumatoid arthritis and total Quality of life. This study is in disagreement with Seca, et al., (2019) who conducted entitled "Effectiveness of acupuncture on pain, functional disability, and quality of life in rheumatoid arthritis of the hand" found that no statistically significant between Total knowledge pain, functional disability with rheumatoid arthritis and total Quality of life.

Conclusions:

This study concluded that More than two third of women with arthritis had unsatisfactory total knowledge. More than half of women with arthritis had poor total psychological state. Less than half of women with arthritis had poor total physical and occupational conditions, and less than half of women with arthritis had poor total quality of life. There was highly statistically significant correlation between total knowledge with psychological, physical, social and total QOL.

Recommendations:

Provide educational programs to Increase women's knowledge regarding rheumatoid arthritis. Priority should be given to increase women's awareness regarding rheumatoid arthritis. Providing emotional and social support for women with rheumatoid arthritis.

References

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