



Quality Of Life in Patients with Rheumatoid Arthritis Related to the Help they use to Perform Daily Activities

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Abstract

This is a descriptive cross-sectional study. The purpose of the study is to evaluate the quality of life in patients with Rheumatoid Arthritis. Objectives: To identify the level of assistance related to daily activities in RA (rheumatoid arthritis) patients. To highlight the quality of life of RA patients and the need for help. To identify the quality of life of patients with RA in relation to gender and age groups. Methodology: Data collection was carried out in the period January-May 2019. The sample was randomly selected. 70 patients with RA were included in this study. These patients were given an international standardized questionnaire administered by us. The questionnaire contains 18 questions through which we obtain the necessary information regarding the level of assistance used in daily activities by patients with RA. The Functional Status Index (FSI) was designed to assess the functional status of patients with rheumatoid arthritis. It measures the level of dependence experienced by the patient in performing daily activities. Questionnaires with the patients were carried out at the "Mother Teresa" University hospital in Tirana, Albania. Before starting the interview, the patient's and family's consent was obtained. To perform the statistical analysis, we used the SPSS program. Version.19 and Microsoft Office 2010. Pearson correlation was applied for IC=99%, $p < 0.01$. Results: The average age of the patients is 55.2 years, minimum 24 years, maximum 72 years. In a distribution according to age groups, it turns out that 59% of these patients are aged 50-59. From this study, it can be seen that the highest percentage of patients with RA is in the District of Tirana (45%). Conclusions: 51% of these patients have a poor quality of life due to addiction as a consequence of RA. 67% need the help of a person or device to perform daily activities. The FSI for addiction was 0.39.

Keywords: arthritis, difficulties, help, pain.

1. Introduction

RA is a chronic, progressive and systemic autoimmune disease characterized by fluctuating symptoms such as pain and fatigue and unpredictable flares of disease [3]-[4]. The first manifestation of AR is pain in the affected joints that is aggravated by movement. Morning stiffness lasting more than an hour is a major feature of inflammatory arthritis. Other signs: weakness, anorexia and weight loss, arthralgia, myalgia, decreased muscle strength, fatigue,

subfebrile temperature, depressive state, anxiety [5] Some types of arthritis affect the heart, eyes, lungs, kidneys and skin as well as the joints.

However, the literature has not explored how RA patients now experience daily life regarding symptoms or impact with no qualitative studies for over 10 years. Previous research has shown that the fluctuation and uncertainty [6] of RA and a non-compliant body [7] can impact on patients' abilities to continue activities they consider necessary or pleasurable [8], but little is known about whether this impact is reduced as symptoms decrease on modern medication regimes. The findings point to a need to increase knowledge about RA, support symptom management and reduce the physical, social and psychological challenges posed by RA in everyday life [9].

Physical activity includes everyday physical activity such as household activity indoors- and outdoors, occupational activity and leisure-time physical activity as well as planned exercise. Physical activity has been defined as "any bodily movement produced by skeletal muscles that results in energy expenditure". Physical inactivity denotes a level of activity less than that needed to maintain good health [10]. As a result of the clinical progression activity limitations occur within a few years [11], and the increased risk of premature death tends to be associated with activity limitations [12].

More activity limitations are found in women with RA than in men and this is explained by lower grip force rather than by gender [13]. The use of assistive devices, mostly used while eating and drinking, significantly reduces the difficulties [14]. People with arthritis have been found to be as physically active as the general population [15], or less active [16]- [17]-[18]- [19]-[20].

RA has many consequences for the individual but also for society in general [21]. Many patients are not able to continue to work at the same level as they would if they had not developed RA. It has been estimated that about one-third of people with RA leave employment prematurely, and work disability involves patients with early RA as well as those with long-standing RA [22].

Participation restrictions in leisure-time activities have also been reported with a reduction of 2/3 after disease onset and the remaining activities are conducted at a much lower level, e.g. watching TV instead of going to the gym [23]. Not only decreased pain, "mobility" and fatigue, but also a "general feeling of wellness" were identified as important outcomes from treatment in an interview study with patients with RA [24]. Moreover, RA is found to have a considerable impact on general health status compared to people with low back pain and the general population [25] and it is therefore important to pay attention to patients' perceived general health.

2. Materials and Methodology

This is a descriptive cross-sectional study. The goal is to highlight the quality of life in patients with Rheumatoid Arthritis. Data collection was carried out in the period January - May 2019. The sample was selected randomly. 70 patients with rheumatoid arthritis were included in this study. Initially, we tried to include 100 patients, but for this period, so many patients were hospitalized. Patients with Rheumatoid Arthritis were given an international standardized questionnaire about the help they use to perform daily activities. The questionnaire used contains 18 questions through which we obtain the necessary information

regarding the level of assistance used in daily activities by patients with Rheumatoid Arthritis.

Functional Status Index (Pilot Geriatric Arthritis Program, Alan M. Jette, 1978, Revised 1980). The Functional Status Index (FSI) was designed to assess the functional status of patients with rheumatoid arthritis [1]. Designed as a clinical tool and an evaluator, the scale measures the level of dependence patients experience in performing daily activities [2]. Questionnaires with the patients were carried out at the "Mother Teresa" University hospital in Tirana, Albania. Before starting the interview, the patient's and family's consent was obtained. The FSI was developed to evaluate a Geriatric Arthritis Pilot Program (PGAP) that sought to improve the quality of life of elderly patients with arthritis [26]. The goals of the program were to prevent disability, restore activity, reduce pain, and promote social and emotional adjustment [27].

The form should take about 5 to 10 minutes to complete. The FSI was found to have a sensitivity of 92% and a specificity of 89%. The validity and reliability of the tool have been supported through clinical practice and research. To perform the statistical analysis, we used the SPSS program. Version.19 and Microsoft Office 2010. Pearson correlation was applied for $IC=99\%$, $p<0.01$.

3. Results and Discussions

In this study, 70 patients with Rheumatoid Arthritis were interviewed in the Department of Rheumatology at the "Mother Teresa" University Hospital Center in Tirana. Of these patients, 59 were women and 11 were men, from which it is clear that RA affects more women than men with a percentage of 84% in women and 16% in men. Based on the study conducted on these patients, the average age of patients with Rheumatoid Arthritis is 55.2 years. Their minimum age is 24 years and the maximum age is 72 years, $STDEV = \pm 8.6$ years. In a distribution according to age groups, it turns out that 59% of these patients are aged 50-59 years, 26% of patients are aged 60-69 years, 11% are aged 20-49 years and only 4% of patients are ≥ 70 years old. The most affected age group is 50-59 years old.

This study also shows that the region with the highest percentage of patients with Rheumatoid Arthritis is the region of Tirana with 45% of patients with Rheumatoid Arthritis, then comes the region of Durrës with 14%, followed by the region of Elbasan with 11%. In the city of Shkodra, it turns out that we have 8% of patients with Rheumatoid Arthritis, 6% in Fier and Lezhë, 3% in Kukës, Pogradec, Ersekë, and the district with the lowest number of patients turns out to be the district of Gjirokastra. Based on the patients' answers about the help they used to walk, 29% of these patients answered that they used the help of another person, 27% of these patients did not use help, 20% of these patients used the help of a device, 14% of patients answered that they are not in a condition to move and 10% of these patients used the help of a device and a person. (see table No. I.)

Regarding the help that RA patients use to climb the stairs, we see that 19% of these patients used the help of a device and person, 34% of these patients are not in a position to climb the stairs, 24% of the patients need help of a person, while 14% of these patients need the help of a device. Regarding the help they use to get up from the chair, 21% of the patients claimed that they need the help of a person, 14% of the patients need the help of a device and a person, 29% of the patients need the help of a device, 17% of these patients are not in a

position to perform this action at all. Regarding the help needed in the writing process, 50% of patients with Rheumatoid Arthritis do not use help to write, 24% of these patients are unable to write, 12% need the help of another person, 10% of patients need the help of a device and another person, while 4% of these patients need only the help of a device. Based on the help that the patient needs to open a container, 51% of these patients are not in a position to perform this action, 26% of these patients need the help of a person, 11% of these patients do not use any help at all, 9% of patients use the help of a device and person, while 3% of patients use only the help of a device. Regarding the help that AR patients use to answer the mobile phone, we see that 60% of the patients did not use help to answer the mobile phone, 19% of the patients used the help of a person, 10% of the patients are not in a position to use the mobile phone, 8% of patients use the help of a device to answer the mobile, while 3% of patients use the help of a device and the person.

As we can see in the table above regarding wearing pants, 44% of patients answered that they need the help of a person to put on pants, 24% of patients do not need help, 17% of patients use the help of a device and person, 12% of patients are not in a position to wear it while 3% of patients need the help of a device. Regarding the help that patients with RA use to button a shirt, 39% of patients answer that they do not need help, 31% of patients refer to needing the help of a person, 13% of patients answer that they need help the help of a device and a person, 11% of patients refer that they are not in a position to button the shirt by themselves, while 6% of patients affirmed that they need the help of a device to button the shirt.

While about the help that patients use to wash all parts of the body, 43% of patients refer that a person helped them, 29% of patients answer that they did not use help to wash body parts, 16% of patients indicate that they have used the help of a device and a person, 6% of these patients refer that they are not in a position to perform this process and yes 6% of patients refer that they used the help of a device to wash all parts of the body. For help with putting on a shirt or blouse, about 44% of patients report that they need the help of a person, 30% of patients report that they do not use help to put on a shirt or blouse, 16% of patients use the help of a device and of a person, 7% of patients answer that they are not in a position to wear the blouse while 3% of patients answer that they need the help of a device to wear the blouse. Regarding the help that patients with RA use to sweep the carpet, 84% of them refer that they are not in a position to perform this action, 7% of patients use the help of a person and equipment, 3% of patients refer that they use the help of a person, 3% of patients refer to using the aid of a device also 3% of patients affirm that they do not use aid to sweep the carpet. To reach the lower cabinets 67% of patients with Rheumatoid Arthritis report that they are unable to do it, 13% of them need the help of a person, 10% of them need the help of a device and a person, 6% need the help of a device and only 4% of them reach the lower cabinets without help. For washing clothes, 56% of patients suffering from RA refer to using the help of a device, 41% indicate that they are unable to wash clothes and 3% use the help of a device and personally.

To clean the yard 87% of patients with RA indicate that they are unable to do it, 6% use the help of a device, 4% require the help of a person and 3% need the help of a device and a person to do it clean the yard Regarding practicing their profession, 74% of people with RA

show that they are unable to practice their profession, 13% of them practice their profession without help, 6% use the help of a person, 4% use the help of a device and 36% need the help of a device and a person. Regarding driving, 83% of RA patients indicate that they are unable to drive, 10% drive with the help of a device and a person, 4% drive without assistance, 2% need for the help of a device and only 1% need the help of a person to drive the car.

To participate in meetings, 48% of patients with RA indicate that they are unable to attend meetings, 16% attend meetings accompanied by a person, 16% need a device and a person to attend meetings, 10% need the help of a device and 10% attend meetings without assistance. 48% of patients suffering from Rheumatoid Arthritis are unable to go out to visit friends, 16% visit friends with the help of a device and a person, 16% only with the help of a person, 10% with the help of a device and 10% go out to visit friends without help.

Table I. Functional aids used by patients with Rheumatoid Arthritis

Items	Without help	The help of a device	One person's help	The help of a device and a person	I am not able to do it
1 Walking	27%	20%	29%	10%	14%
2 Climbing up stairs	9%	14%	24%	19%	34%
3 Rising from a chair	19%	29%	21%	14%	17%
4 Writing	50%	4%	12%	10%	24%
5 Opening a container	11%	3%	26%	9%	51%
6 Dialing a phone	60%	8%	19%	3%	10%
7 Putting on pants	24%	3%	44%	17%	12%
8 Buttoning a shirt/blouse	39%	6%	31%	13%	11%
9 Washing all parts of the body	29%	6%	43%	16%	6%
10 Putting on a shirt/blouse	30%	3%	44%	16%	7%
11 To sweep the carpet	3%	3%	3%	7%	84%
12 To reach the lower shelves	4%	6%	13%	10%	67%
13 To wash clothes	0%	56%	0%	3%	41%
14 To clean the yard	0%	6%	4%	3%	87%
15 To realize your profession	13%	4%	6%	3%	74%
16 To drive the car	4%	2%	1%	10%	83%
17 To participate in meetings	10%	10%	16%	16%	48%
18 To go out to visit friends	10%	10%	16%	16%	48%

Based on the questionnaires carried out among patients with Rheumatoid Arthritis, it results that 51% of them have a bad quality of life in relation to the constant help they need on a daily basis. These patients need the most help in taking care of themselves to put on a shirt, to put on pants, to wash all parts of the body, where they definitely need the help of a person. Meanwhile, to walk, to climb the stairs or for household work such as sweeping the carpet, washing clothes, they find the solution in the use of assistive devices. The largest percentage of patients report that they are not able to exercise their profession without help, they are not even able to drive a car, reach low cabinets or go out to meet friends without the help of a person or device. 29% of these patients have a poor quality of life, 11% have a good quality

of life and 9% have a very bad quality of life where they need absolute help in every activity they perform during the day. (see Fig. 1.)

Quality of life according to targeting referring to assistance for daily activities

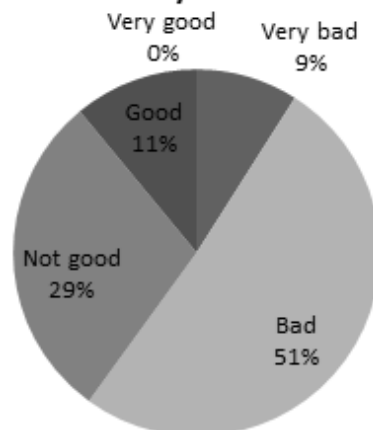


Figure 1. Quality of life refers to assistance with daily activities

Based on the results of the conducted study, we see that a greater percentage of 10.2% of women have a very bad quality of life and need the help of a person and a device to carry out their daily activities. Women have a worse quality of life with a percentage of 52.5% compared to men with a percentage of 45.5%. In these cases, these patients need the help of a person for their daily life.

We have 30.5% of women and 27.3% of men who have a poor quality of life and use the help of a device. We see that men, 27% of them, have a better quality of life compared to women with 6.8%, but we see that no patient with RA taken in the study has a very good quality of life. (see Fig. 2.)

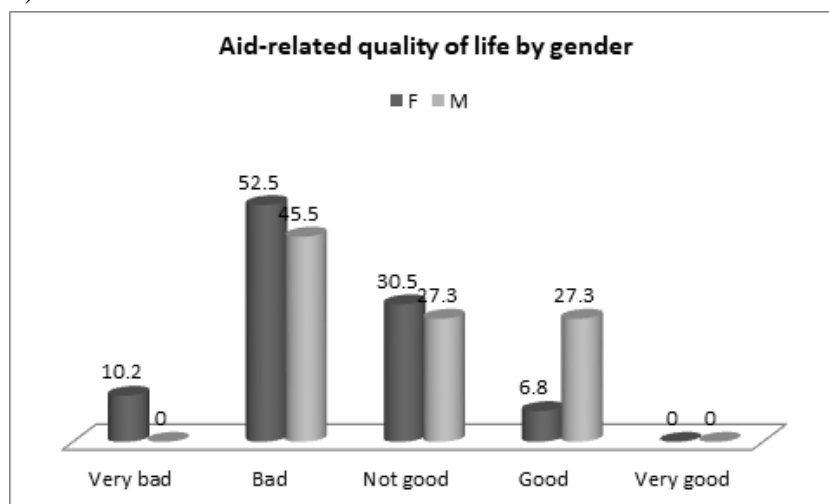


Figure 2. Aid-related quality of life by gender

Based on the results of the conducted study, we see that the 20-49 age group in the largest percentage of 50% has a poor quality of life and uses the help of a person for the activities they do. The age group that has the worst quality of life is the 60-69 age group with a percentage of 67% and uses the help of a device and a person in their daily life.

The age group ≥ 70 years old seems to have a good quality of life, where 30% of them with RA only need the help of a device to carry out their activities, but we must take into account the fact that the study included only 3 patients in this age group and this result is not statistically significant. As we can see from the chart, none of the patients in the study have a very good quality of life, so no patient with RA can live or function without help. We also see that the highest percentage has a very bad quality of life compared to other groups, the 20-49 age group, 13%. These people are not able to carry out their activities or even to take care of themselves. (see Fig. 3).

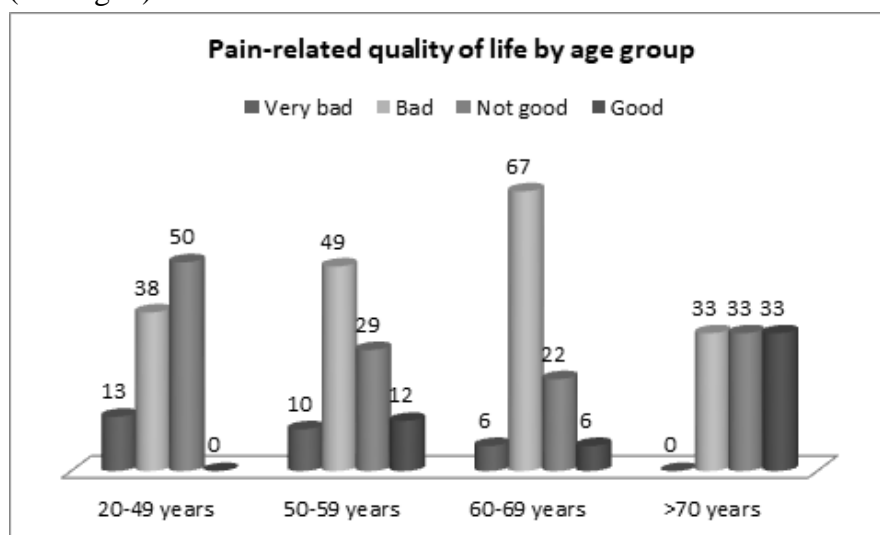


Figure 3. Pain-related quality of life by age group

Table II. Correlations between age, gender and level of patients' need for help

		FSI- Help
Age_help	Pearson Correlation	-.147
	Sig. (2-tailed)	.224
	N	70
Gender_help	Pearson Correlation	.139
	Sig. (2-tailed)	.250
	N	70

From table II, we notice that we have a statistically weak relationship between age, gender and the need for help. From this it follows that with increasing age, the level of quality of life decreases and the need for help increases, which reflects in the drop in points in total. From the Pearson correlation we have ($r=-0.147$, $p=0.224$). Regarding gender, we notice the same thing, but the need for help among women is greater, so they have greater dependence and it is referred to as a very bad quality of life. From the Pearson correlation we have ($r=0.139$, $p=0.250$).

4. Conclusions

Based on the data of the conducted study, it is noted that the largest percentage of patients (51%) with Rheumatoid Arthritis have a bad quality of life in relation to the constant help they need on a daily basis. Women have a worse quality of life with a percentage of 52.5%

compared to men with a percentage of 45.5%. In these cases, these patients need the help of a person for their daily life. The age group that has the worst quality of life is the 60-69 age group with a percentage of 67% and uses the help of a device and a person in their daily life. To walk, 29% of these patients use the assistance of another person, 20% of these patients use the assistance of a device, 14% of the patients are unable to move and 10% of these patients use the assistance of a device and one person together. To climb the stairs, 36% of these patients used the help of a device and person, 29% of these patients are not able to climb the stairs, 21% of the patients need the help of a person. The FSI for addiction was 0.39, which correlates with foreign literature in studies done by different authors regarding the addiction that these patients have in their daily lives.

We verify the alternative hypothesis that the quality of life in patients with rheumatoid arthritis is related to age, that is, the older the age, the worse the quality of life. It is proven that the quality of life is worse in women, but this is not statistically significant.

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