THE QUALITY OF LIFE STATUS OF PATIENTS WITH RHEUMATOID ARTHRITIS AND OSTEOARTHRITIS

Yrd.Doç.Dr. Ali GÜR 1  Yrd.Doç.Dr. Kemal NAS 2
Yrd.Doç.Dr. Remzi ÇEVİK 3  Prof.Dr. FERDA ERDOĞAN 4
Dr. AZİZ DENLİ 5

ABSTRACT

In chronic rheumatic diseases, traditional epidemiological measures of disease outcome reflect only the physical dimension of the disease and neglect the mental and social aspects. In recent years, there has been a great interest in quality of life measures that reflect physical, mental and social, dimensions together.

This study was designed to assess and compare quality of life status of patients with rheumatoid arthritis and osteoarthritis. For this purpose, Arthritis Impact Measurement Scales health Status Questionnaire (AIMS) was evaluated in 139 subjects: 59 with rheumatoid arthritis and 80 with osteoarthritis. Quality of life was assessed using the 9 different subscales of AIMS.

The mean age of patients with rheumatoid arthritis was 48.8 ± 13.88 years (range 36-63), while the mean age of patients with osteoarthritis was 52.20 ± 7.03 years (range 39-68). Patients with rheumatoid arthritis had significantly higher impact scores in all subscales (P<0.001) except anxiety. There was no significant difference between rheumatoid arthritis and osteoarthritis as to anxiety (P>0.05).

The results point out that among these two patient groups, those with rheumatoid arthritis suffer greater impact on the quality of life.

Key Words: Rheumatoid arthritis, Osteoarthritis, Quality of life, AIMS

INTRODUCTION

In chronic rheumatic diseases, such as rheumatoid arthritis (RA and osteoarthritis (OA), traditional epidemiological measures of disease outcome reflect only the physical dimension of the disease and neglect the mental and social aspects. In recent years, there has been a great interest in quality of life measures that reflect physical, mental and social, dimensions together.

The use of questionnaire measures of health status has become an important approach to assessing outcome in the rheumatic diseases (1-3). There are a number of conceptual and practical advantages in using these questionnaires as arthritis outcome measures (4). The major practical advantage of health status questionnaires is their relatively low cost. Since they
are usually self-administered, they can provide information in both clinical research and clinical practice settings, with a minimal investment of professional time. The Arthritis Impact Measurement Scales (AIMS) was one of the first questionnaires specifically designed for the purpose of assessing health status in subjects with rheumatic diseases (3,5). Its measurement properties are good and it has come to be widely accepted in the many countries for a variety of uses (5-7). The original AIMS questionnaire contained 45 items grouped into 9 scales.

**OBJECTIVE**

This study was designed to assess and compare quality of life status of patients with rheumatoid arthritis and osteoarthritis.

**MATERIALS AND METHODS**

Arthritis Impact Measurement Scales health Status Questionnaire (AIMS) was evaluated in 139 subjects; 59 with rheumatoid arthritis and 80 with osteoarthritis. Quality of life was assessed using the 9 different subscales of AIMS. The AIMS contain 45 items which form 9 component scales, each related to 1 of 4 dimensions as follows: (a) Physical Disability dimension — Mobility scale, Physical Activity scale, Dexterity scale, Activities of Daily Living scale, and Household Activities scale; (b) Pain dimension— Pain scale; (c) Psychological Disability dimension — Anxiety scale and Depression scale; (d) 1 other separate scale, the Social Activity scale. The score for each component scale was obtained by summing the item scores and then indexing this sum to a range of scores from 0-10 for each scale (8). Each participant’s sex, age, and disease duration were recorded, together with the nature of any health problems other than rheumatoid arthritis and osteoarthritis.

Statistical analysis: Differences between the patients with rheumatoid arthritis and osteoarthritis of all assessed variables were examined by using the student’s t test.

**RESULTS**

Table 1: AIMS scale scores in rheumatoid arthritis and osteoarthritis subject groups.

<table>
<thead>
<tr>
<th>VARIABLES (AIMS Scale)</th>
<th>OSTEO ARTHRITIS (n=80)</th>
<th>RHEUMATOID ARTHRITIS (n=59)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility level</td>
<td>0.52 1.03</td>
<td>1.52 1.47</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Physical activity</td>
<td>2.16 1.89</td>
<td>3.48 1.67</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Dexterity</td>
<td>0.65 0.93</td>
<td>2.96 1.83</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Household tasks</td>
<td>0.76 0.95</td>
<td>2.35 1.66</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Social activities</td>
<td>0.79 1.18</td>
<td>1.58 1.63</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Activities of daily living</td>
<td>0.59 1.01</td>
<td>1.17 1.32</td>
<td>&gt;0.01</td>
</tr>
<tr>
<td>Pain dimension</td>
<td>2.55 1.27</td>
<td>3.28 1.16</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Depression</td>
<td>2.48 1.83</td>
<td>3.21 2.09</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Anxiety</td>
<td>3.02 2.07</td>
<td>3.38 2.17</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>
The mean age of patients with rheumatoid arthritis was 48.84 (range 36-63), while the mean age of patients with osteoarthritis was 52.20 (range 39-68). Patients with rheumatoid arthritis had significantly higher impact scores in all subscales (P<0.001) except anxiety. There was no significant difference between rheumatoid arthritis and osteoarthritis as to anxiety levels (P>0.05). The means of the AIMS scale scores for subjects in the performance test sample, grouped by diagnosis of rheumatoid arthritis or osteoarthritis, are presented in Table-1. Mean scores ranged from a good health status score of 0.52 on Mobility level and in subjects with osteoarthritis to a poorer health status score of 3.38 on anxiety levels in subjects with rheumatoid arthritis. The mean scores for rheumatoid arthritis and osteoarthritis subjects differed substantially except for the expected poorer scores on anxiety levels in the osteoarthritis group.

**DISCUSSION AND CONCLUSION**

Health is a multidimensional construct that includes biological, psychological and social features. Health (or the lack of it) is determined by the complex interactions among environmental/social factors and the psychological and biological characteristics of the individual.

Chronic disease accounts for the majority of health care expenditures in the whole world. The primary goals of health care for a chronic disease, such as rheumatoid arthritis and osteoarthritis, are to minimize functional loss, maintain independence, and preserve quality of life. Identifying the determinants of health status outcomes and the relationships among these determinants may lead to comprehensive interventions that might reduce the social and economic costs associated with RA and OA.

It has been shown that satisfaction with the same level of health status can vary among patients with the same level of health status (9). The inclusion of a section to measure the attribution of arthritis health status problems to arthritis or other causes is important because many patients, especially in subject groups with elderly patients, have co-morbid conditions that can independently affect their health status. It has been argued that outcome assessment should be focused on those aspects of health status that are of most concern to the patient (10).

Functional disability is a major outcome for patients with rheumatoid arthritis. It has been described as a progressive deterioration of functional abilities during the course of the disease. However, functional disability in early RA is not clearly documented because few studies have focussed on physical functional disability at this stage (11-13). There is controversy about either a rapid progression or a stable of functional disability in the early years of the disease (14). Moreover, the definition of early RA varies from the 0-2 year to the 0-5 year period after the onset of the disease. Also, the components of functional disability in early RA have not been much documented in the literature (14,15). The Health Assessment Questionnaire (HAQ) is a measure of functional disability, that has been developed and proved valid in RA. It is widely used and provides a useful measure of a major component of health status (1). It has been translated and validated in at least 10 languages (16). Guillemin
et al. have reported that functional disability is marked at the early stage of the disease, and disease activity is a major contributor to functional disability in the first 5 years of the disease.

Impaired muscle function and reduced functional capacity is frequently observed in patients with rheumatoid arthritis (17) or osteoarthritis of the hip-and knee joints (18) and is often the reason for rehabilitation provided in primary health care (19).

Muscular weakness and atrophy in RA have been described as being due not only to inactivity or pain but also to muscular involvement attributable either to the disease (myopathy or neuropathy) or to treatment with corticosteroids. In addition, psychological factors such as motivation and personality may influence muscle function in RA (19).

Apparently, muscle function in diseases of this sort depends partly on specific characteristics of the disease and partly on psychological, social and pain-related factors. Problems concerning the aspects of experienced muscle function were reported frequently in both the RA and OA groups. These findings are in line with the basic view of rheumatic disorders being associated with muscular impairment.

To conclude, the results of this study to be the following: - the RA groups differed on the indices of experienced problems used relating to muscle strength, endurance, dexterity, social activities, depression; -RA patients with multi-joint involvement appeared to experience muscular, physical, and social problems to a greater extent than those with osteoarthritis; - even though subjective reports of these problems did not differ for the two groups, OA patients showed less impact than RA patients, as assessed by quality of life tests. This suggested patients with RA to be a major factor in muscular, functional, social and psychosocial problems and emphasized the need of considering it in planning rehabilitation programs for these patients. In addition, psychological factors (e.g. motivation) and social factors may be involved. Thus, RA patients are participating in local rehabilitation programs to a higher extent than OA patients and are therefore, perhaps, more experienced in coping with pain during physical exercise.

The results point out that among these two patient groups, those with rheumatoid arthritis suffer greater impact on the quality of life. In addition, our study support further investigations of the relationships between psychosocial factors, such as helplessness, and the development of physical disability in patients with this often devastating chronic rheumatic disorder, such as RA and OA.
ÖZET

ROMATOİD ARTRİTLİ VE OSTEOARTRİTLİ HASTALARIN YAŞAM KALİTESİ DURUMLARI

Kronik romatizmal hastalıklarda hastalığın gidişatinin geleneksel epidemiyolojik ölçümleri hastalığın sadece fiziksel yönünü yansıtır ve mental ve sosyal yön ise gözardı edilir. Son yıllarda hastalığın fiziksel, mental ve sosyal yönünü hep birlikte değerlendiren yaşam kalitesi ölçümlerine ilgi gittikçe artmaktadır.


Romatoid artritli hastaların ortalama yaşı 48.84 ± 13.88 yıl (36-63 yaşlar arası) iken, osteoartritli hastaların ortalama yaşı 52.20 ± 7.03 yıl (39-68 yaşlar arası) idi. Romatoid artritli hastalar osteoartritli hastalara göre anksiyete hariç tüm alt skalalarda anlamlı olarak daha yüksek skorlara sahipti (P<0.001). Oysa anksiyete açısından osteoartritli ve romatoid artritli hastalar arasında anlamlı farklılık yoktu (p>0.05).

Bu sonuçlar bu iki hasta grubudan romatoid artritli hastaların osteoartritli hastalara göre yaşam kalitesi yönünden daha fazla etkilendiğini ortaya koymaktadır.

Anahtar Kelimeler: Romatoid artrit, Osteoartrit, yaşam kalitesi, AIMS.

REFERENCES


