

Itineraries of the rheumatic patients towards the rheumatologist in DR Congo

Lebughe LP, Malemba JJ, Divengi JP, Mbuyi-Muamba JM

Abstract

Objectives: To describe the itineraries of the rheumatic patients towards the rheumatologist.

Methods: A descriptive cross-sectional study was performed in patients attending the rheumatology unit of the University Hospital of Kinshasa from 1st October 2012 to 31st March 2013. Data collected were general demographic parameters, educational level, prior treatment and the delay between the onset of symptoms and the first consultation.

Results: Eighty six patients were included with 53 women (61.6%) and 33 men. Mean age was 52.4 ± 8.3 years and the age at onset symptom was 47.3 ± 7.2 years. Disease duration before rheumatologist consultation was 4.7 ± 4.3 years. The lower age was equal to 55 years, low level of education and female gender were the determinants of the long delay in the consultation of the rheumatologist. Prior treatment consisted primarily of NSAIDs and paracetamol.

Conclusion: Rheumatic patients followed at the UHK generally consult after a relatively long period, therefore delaying the diagnosis and the treatment.

Keywords: Rheumatologist, Itineraries

Introduction

Rheumatic diseases are a common problem in daily medical practice in Africa. They affect all age groups, undertake the functional prognosis of patients and have a significant socio-economic impact¹⁻³. Therefore, the early support of these diseases is of great importance, particularly in the inflammatory rheumatism for which the early diagnosis is key to a successful outcome and improve the prognosis and the impact of the quality of life.

Data on the itineraries of rheumatic patients are scarce in Democratic Republic

of Congo. The few available studies reported a long delay in diagnosis and treatment of rheumatic patients²⁻⁴. This delay justified relatively late adequate management, thus with a poor quality of life of these patients and a worse response to treatment⁵⁻⁷. The objective of this study was to describe the itineraries of the rheumatic patients attended by a rheumatologist between the onset of the disease and the first consultation in the Rheumatology unit.

Materials and Methods

This was a cross-sectional study at the UHK from 1st October 2012 to 31st January 2013. Patients seen for the first time in the Rheumatology unit were consecutively included. Informed consent was obtained. Patients with inflammatory disease were included in the study.

Data were collected regarding general demographics, delay between the onset of symptoms and the first visit with a rheumatologist, reason for consultation, use of alternative medicine approaches, preceding therapeutic modalities, and the educational level.

The data were recorded using Excel 2010 software and analysed with statistical packages SPSS 17.0. Continuous variable had normal distributions and are presented as means and standard deviations. The other continuous variables had non-normal distributions and are presented as medians. Student's test was used to compare means and the Chi-squared test for comparison of proportions. Simple linear regression analysis was used to determine the correlation between quantitative variables. P-values < 0.05 were considered significant.

Results

During this period, eighty six patients were included in this study. Table 1 shows the general features of the population.

Rheumatology Unit,
Internal Medicine
Department, University
Hospital of Kinshasa, DR
Congo

Corresponding author:
Dr. Lebughe L Pierrot,
University Hospital of
Kinshasa, PO Box 123
Kinshasa XI, Democratic
Republic of Congo. Email:
lebughe7@yahoo.fr

Table 1: Characteristics of the studied population

Characteristic	
Age (mean±SD, year)	52.4±8.3
Age at onset symptom (mean±SD, year)	47.3±7.2
Sex	
Male (n,%)	33 (38.4)
Female (n,%)	53 (61.6)
Disease duration (median, year)	3.2
Disease duration (mean±SD, year)	4.7±4.3
Rheumatism (M/F, mean±SD)	
RA	4/20 (42.0±10.8)
SpA	20/17 (43.2±12.4)
SLE	0/3 (28.1±3.4)
SSc	0/1
Dermatomyositis	1/0
JIA	1/1 (13.5±0.4)
Unclassified arthritis	7/11 (36.2±7.6)

RA = Rheumatoid Arthritis, SpA = Spondyloarthritis, SLE = Systemic Lupus Erythematosus, SSc = Systemic Sclerosis, JIA = Juvenile Idiopathic Arthritis

Patients were mostly female (61.6%) with a mean age of 52.4 years. All patients had prior consultations with other caregivers, 73% had a prior consultation with a general practitioner. A high variability was noted between the onset of first symptom and first visit to a rheumatologist, ranging from less than one month to over 4 years.

Table 2: Determinants of the long delay in the consultation

Variables	P-value	OR (IC 95%)
Age (years)		
> 55		
≤ 55	0.013	1.19 (1.02-2.63)
Education		
Secondary and university study		
Primary and illiterate	0.002	2.33 (1.34-4.70)
Gender		
Male		
Female	0.012	1.85 (1.15-3.25)

Pain was the most prominent symptom (92%); swollen joints (30%), articular deformation (13%), extra articular features (11%) were often reported. The majority of patients attempted at least a secondary educational level (80%); only 5% were illiterate. The majority of patients did not have a diagnosis at first consultation with a rheumatologist. Prior treatment consisted primarily of NSAIDs and paracetamol. Minority of patients (15%) had primarily resorted to physiotherapy. Almost half of the patients (47%) had sought help of alternative medicine, especially in the traditional medicine. No case of use of oral corticosteroids or DMARDs was initially reported.

In the univariate analysis, Table 2 shows that female gender, age older than 55 years old and low level of education were the determinants of the long delay in consulting a rheumatologist. Only 15% of the patients were referred to a rheumatologist with a referral letter. The relevance of reference letter came from the general practitioner and other specialists as the ophthalmologists and the dermatologists. Most of the patients had visited a rheumatologist with no satisfactory information from prior treatment.

Discussion

The present study was carried out to describe the itineraries followed by rheumatic patients before consultation to a rheumatologist. Our interest was focused on the course of patients with inflammatory rheumatism for which a long delay to diagnosis would have a real impact on both the functional prognosis that is vital. Mean age of patients was 52.4 years with an average of over 4 years between the onset of symptoms and consultation with a rheumatologist. This long delay before consultation observed in this study was reported in the literature particularly in sub Saharan Africa. Several explanations can be discussed. Firstly, we have noted a problem in the care system organization and the low level of awareness of population on rheumatic diseases. On the other hand, the poverty that characterizes the population does not allow a lot of people accessibility to health care, as well as the lack of a health insurance system. This is among others justified by excessive self-medication, often on the advice of entourage.

Thus, self-medication may be understood by lack of pharmaceutical legislation prohibiting the delivery of drugs without medical prescription. The general practitioner and traditional practitioner were often consulted in case of failure of the auto-medication.

One third of patients were directly referred to a physiotherapist, revealing weaknesses in a system where patients go directly to therapy without a clear diagnosis. Patients with less education would misjudge or ignore altogether the risks of self-medication abuse. They are also easier to turn to traditional medicine which is supposed to cure all diseases, even those that modern medicine considers incurable.

Additionally, a few number of patients (15%) had a referral letter from general practitioners. The role of the female in delayed consultation and the patient itinerary does not appear to have any unique explanation; especially all previous studies conducted in the same area reported a female predominance among rheumatic patients^{8,10,12}. We think that one possible reason could be the low income of the woman often depending on that of his husband. Also, the threshold of pain sensitivity appears lower compared to men. A study on a larger sample would clarify this issue.

A relatively long extension of time between the onset of the symptoms and consulting a rheumatologist is reported in several African studies⁶⁻⁹.

Causative factors were particularly low levels of education, low socioeconomic status and lack of organization of health care systems. In a study of 527 patients with rheumatoid arthritis for example, Hernández-García *et al*¹¹ had found that the delay in diagnosis varied significantly with marital status, family support, level of education, age at onset of the symptoms, the articular swelling and functional capacity of patients. Feldman *et al*¹⁵ arrived at the same conclusion. Palm *et al*¹³ described an association between the delay before the consultation and gender of patients with rheumatoid arthritis.

Conversely, Kumar *et al*⁵ in a similar study did not find an association between, firstly, the late consultation and, secondly, age and gender. It is the same for the study of Ibn Yacoub *et al*¹⁴ about 100 patients with ankylosing spondylitis.

Conclusion

The management of rheumatic patients encounters significant delays in our environment. Progress must be done to improve the organization of our system of care in order to minimize the long itinerary taken by the patient to the rheumatologist. The organization of medical screening campaigns of rheumatic diseases in the population to access care in large hospitals could be an asset to reduce this long itinerary.

References

1. Bwanahali K, Mbuyi-Muamba JM, Kapita B. Arthrose, Goutte et polyarthrite rhumatoïde chez les consultants en Médecine Interne à Kinshasa. *La Revue du Rhumatisme*. 1991; **58** (2): 105 – 111.
2. Malemba JJ, Mbuyi-Muamba JM. Clinical and epidemiological features of rheumatic diseases in patients attending the University hospital in Kinshasa. *Clin Rheumatol*. 2006; **27**: 47-54.
3. Mbuyi-Muamba JM, Tshiani K, Tshifu F. Etude rétrospective de quelques maladies rhumatismales aux Cliniques Universitaires de Kinshasa. *Annales de la Société Belge de médecine tropicale*. 1980; **60**: 387 – 393.
4. Lebughe L, Malemba JJ, Mbuyi-Muamba JM. Profil épidémiologique, clinique et radiographique des spondylarthropathies en milieu hospitalier à Kinshasa. Mémoire de fin de spécialisation. Juin 2013.
5. Kumar K, Daley E, Carruthers DM, Situnayake D, Gordon C, Grindulis K *et al*. Delay in presentation to primary care physicians is the main reason why patients with rheumatoid arthritis are seen late by rheumatologists. *Rheumatology* (Oxford). 2007; **46**(9): 1438-1440.
6. Mijiyawa M. Epidémiologie des affections rhumatologiques en Afrique subsaharienne. *Rev Rhum Ed Fr*. 1993; **60** (6) : 451-457.
7. Belkhou A, Cherquaoui H, El Hassani S. Le retard au diagnostic et au traitement du patient rhumatisant: Quels déterminants ? *Rev Mar Rhum*. 2012; **20**:38-41.
8. Ndao AC, Ndong S, Lepka FK, *et al*. Retentissement socio-économique et qualité de vie au cours de la polyarthrite rhumatoïde au Sénégal. *Médecine d'Afrique noire*. 2012; **59**: 415-420.
9. Dincer U, Cakar E, Zeki Kiralp M, Dursun H. Diagnosis delay in patients with 5 ankylosing spondylitis: possible reasons and proposals for new diagnostic criteria. *Clin Rheumatol*. 2008; **27** (4): 457 - 462.
10. Slimani S, Amokrane K, Guellati B, Mohammed-Hadj A, Ladjouze-Rezig A. Caractéristiques épidémiologiques et cliniques d'une consultation de rhumatologie de l'est algérien, Société française de Rhumatologie, Congrès 2008.
11. Hernández-García C, Vargas E, Abásolo L, Lajas C, Bellajdell B, Morado IC, *et al*. Long time between onset of symptoms and access to rheumatology care and DMARD therapy in a cohort of patients with rheumatoid arthritis. *J Rheumatol*. 2000; **27**(10): 2323-2328.
12. Ouédraogo D, Bori-Bata F, Drabo J. Sujet âgé et affections rhumatologiques en consultation de rhumatologie au Burkina Faso, 24e Congrès français de rhumatologie 2011, Paris.
13. Palm O, Purinszky E. Women with early rheumatoid arthritis are referred later than men. *Ann Rheum Dis*. 2005; **64** (8):1227-1228.
14. Ibn Yacoub Y, Amine B, Laataris A, Bensabbah R, Hajjaj-Hassouni N. Relationship between diagnosis delay and disease features in Moroccan patients with ankylosing spondylitis. *Rheumatol Int*. 2012; **32**(2):357-360.
15. Feldman DE, Bernatsky S, Haggerty J, Leffondré K, Tousignant P, Roy Y *et al*. Delay in consultation with specialists for persons with suspected new onset rheumatoid arthritis: a population-based study. *Arthritis Rheum*. 2007; **57**(8):1419-1425.