Applicability of the EULAR recommendations on the role of the nurse in the management of chronic inflammatory arthritis in Portugal

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ABSTRACT

Objectives: To evaluate the level of agreement and applicability of the EULAR recommendations for the role of the nurse in the management of chronic inflammatory arthritis in Portugal.

Methods: Nurses from all Portuguese rheumatology centers were invited to fill-in a questionnaire addressing the level of agreement (1=strongly disagree to 5=strongly agree) and the level of confidence (1=no confidence to 5=complete confidence) in the applicability of each of the recommendations. Comparisons were established between subgroups of nurses.

Results: A total of 75 nurses (85% female; mean (SD) of 3.9 (4.1) years of practice, 32% with some type of training in rheumatology) participated in the study. The mean level of agreement with the recommendations was 4.8 (SD 0.3). The level of confidence in their full applicability was 3.6 (SD 0.8). Significantly more nurses with rheumatology training totally agreed with recommendations 7 (88% vs 73%, p=0.03) and 3 (96% vs 65% p=0.04) and were fully confident in the applicability of recommendations 2, 3, 7, 9 and 10, comparing with those without specific training.

Conclusions: The overall level of agreement with EULAR recommendations among Portuguese nurses is high, although rheumatology does not exist as a nursing specialty. Agreement and confidence in the applicability of these recommendations is higher among nurses with specific training, underlining the importance of continuous education for future commitment.

Keywords: Arthritis/nursing; Nurse's Role; Evidence-Based Medicine/methods

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INTRODUCTION

Several studies highlighted the added value of the involvement of nurses in the management of patients with chronic inflammatory arthritis (CIA)[1-6]. The support and counsel from a knowledgeable nurse can help these patients to improve their quality of life, in addition to preventing or controlling joint damage, preventing loss of function, and decreasing pain[3]. This evidence has recently led the European League Against Rheumatism (EULAR) Nursing Task Force to formulate a set of recommendations for the role of nurses in this particular context[7].

Rheumatology as a nursing specialty does not exist in Portugal, which may constitute an important barrier in implementing these recommendations. Nevertheless, during the last decade we witnessed an increasing attention given to nurses working with rheumatic patients. The emergence of new medications, new treatment strategies and the higher awareness of late complications, requiring more intervention from the nurse, also helped to increase the responsibility of this health professional group in the management of patients with CIA. Despite of a lack of formal training, Portuguese nurses currently working in the area of rheumatology have had, during the last years, the opportunity to attend courses (organized by the Portuguese Society of Rheumatology or by pharmaceutical companies), which contributed to develop important skills and to improve and standardize therapeutic attitudes. With publication of the EULAR recommendations, Portuguese rheumatology nurses have the opportunity to further develop and define their role in the management of patients with CIA.

The purpose of this study was to evaluate the level of agreement and confidence in the applicability of the EULAR recommendations among nurses in Portugal.

METHODS

STUDY POPULATION

We conducted a survey in January 2012, for which we invited all nurses working at the 22 Portuguese rheumatology departments.

EVALUATION OF THE RECOMMENDATIONS

The level of agreement and confidence in the applicability of each of the recommendations was assessed using a Likert scale (1=strongly disagree/no confidence, 5=strongly agree/complete confidence).

We also evaluated the following demographic and professional factors: gender, hospital and department where nurses worked (outpatient area - day-care unit, outpatient clinic and rheumatological techniques; or inpatient area - ward) and for how long; whether they worked exclusively in rheumatology and the training in rheumatology they had received. Nurses were further inquired about interest in having rheumatology training, such as nursing specialty in rheumatology, master's degree or training courses.

STATISTICAL ANALYSIS

Categorical variables are expressed as frequencies and continuous variables in the form of mean (standard deviation).

The level of agreement and level of confidence in the applicability of each of the recommendations were compared between some subgroups of nurses stratified according to: training in rheumatology obtained (yes/no), exclusive work in rheumatology (yes/no), work performed at the day-care unit (yes/no), and length of working time in rheumatology (<2/≥2 years, median time). Group comparisons were made both with the Chi-square and the Mann-Whitney tests (assuming a continuous and non-normal distribution).

Statistical analysis was performed using Stata SE version 11 and a significance level of 5% was assumed.

RESULTS

A total of 75 nurses (85% female; mean (SD) of 3.9 (4.1) years of practice) from 14 rheumatology centers were included in the study representing a good coverage of Portugal.

Forty-five nurses (60%) worked at the outpatient area only, twenty (27%) at the inpatient area only and ten (13%) at both places. A total of 37 (49%) nurses worked at the day-care unit. Only fourteen nurses (19%) worked exclusively at rheumatology departments, the others being shared with other departments (eg: Gastroenterology, Nephrology, Internal Medicine, Immuno-allergology). Almost all nurses (99%) stated to be interested in receiving more training and 48% would like to have the formal specialty in rheumatology. However, only 24 (32%) had received some type of training, most of it promoted by pharmaceutical industry or rheumatology departments.

On average, the level of agreement with the 10 EULAR recommendations was 4.80 (SD 0.30) (average for individual recommendations ranging from 4.62(0.71) to 4.97(0.16) in a scale of 1-5). The recommendations achieving the highest level of agreement were recommendations 8 and 2. The mean level of confidence in the applicability of the recommendations was 3.60 (SD 0.83) (average for individual recommendations ranging from 3.22 (1.30) to 4.07 (1.05)) (Table I).

Comparing nurses with and without specific training in rheumatology, a significantly higher proportion of those who received training totally agreed with recommendations 3 and 7 (Table II). Comparing nurses working and not working at a day-care unit, the former had a higher level of agreement with recommendation 3. There were no significant differences in the level of agreement when comparing nurses with longer (≥ 2 years) and shorter (<2 years) working time in rheumatology and nurses with and without exclusive work in rheumatology.

Significantly more nurses with specific training in rheumatology were fully confident in the applicability of recommendations 2, 3, 7, 9 and 10 compared to those without training (Table III). Nurses working at a day-care unit had a higher level of confidence in the full applicability of recommendation 7, but were less confident with recommendation 4. A higher proportion of nurses with longer work experience in rheumatology were fully confident in the applicability of recommendations 7 and 8 compared to those with shorter experience. There were no differences in the levels of confidence of the applicability of the recommendations, when comparing nurses with and without exclusive work in rheumatology.

DISCUSSION

To our knowledge, this is the first assessment of the EULAR recommendations for the role of the nurse in the

TABLE I. LEVEL OF AGREEMENT AND LEVEL OF CONFIDENCE IN THE APPLICABILITY OF THE EULAR RECOMMENDATIONS

Recommendations		Level of agreement		Level of confidence in applicability
1 Patients should have access to a nurse for education to improve knowledge of inflammatory arthritis and its management throughout the course of their disease	Mean (SD)	4.84 (0.46)	Mean (SD)	3.70 (1.02)
	% strongly agree	88%	% complete confidence	22%
2 Patients should have access to nurse consultations in order to experience improved communication, continuity and satisfaction with care	Mean (SD)	4.89 (0.35)	Mean (SD)	3.30 (1.21)
	% strongly agree	91%	% complete confidence	18%
3 Patients should have access to nurse-led telephone services to enhance continuity of care and to provide ongoing support	Mean (SD)	4.62 (0.71)	Mean (SD)	3.44 (1.19)
	% strongly agree	75%	% complete confidence	21%
4 Nurses should participate in comprehensive disease management to control disease activity, to reduce symptoms and to improve patient preferred outcomes	Mean (SD)	4.74 (0.63)	Mean (SD)	3.22 (1.30)
	% strongly agree	84%	% complete confidence	17%
5 Nurses should identify, assess and address psychosocial issues to minimise the chance of patients' anxiety and depressions	Mean (SD)	4.78 (0.53)	Mean (SD)	3.61 (1.04)
	% strongly agree	82%	% complete confidence	21%
6 Nurses should promote self-management skills in order that patients might achieve a greater sense of control, self efficacy and empowerment	Mean (SD)	4.81 (0.42)	Mean (SD)	3.75 (0.99)
	% strongly agree	82%	% complete confidence	23%
7 Nurses should provide care that is based on protocols and guidelines according to national and local contexts	Mean (SD)	4.68 (0.68)	Mean (SD)	4.01 (0.98)
	% strongly agree	77%	% complete confidence	39%
8 Nurses should have access to and undertake continuous education in order to improve and maintain knowledge and skills	Mean (SD)	4.97 (0.16)	Mean (SD)	4.07 (1.05)
	% strongly agree	97%	% complete confidence	42%
9 Nurses should be encouraged to undertake extended roles after specialised training and according to national regulations	Mean (SD)	4.86 (0.37)	Mean (SD)	3.67 (1.09)
	% strongly agree	88%	% complete confidence	26%
10 Nurses should carry out interventions and monitoring as part of comprehensive disease management, in order to achieve cost savings	Mean (SD)	4.80 (0.40)	Mean (SD)	3.35 (1.27)
	% strongly agree	80%	% complete confidence	21%

Means and SD are presented

management of patients with CIA. These have been extremely well accepted in Portugal, with an overall level of agreement (of a maximum of 5) of 4.80 (SD 0.30) and level of confidence in their applicability of 3.60 (SD 0.83). These results likely reflect the increasing involvement of nurses in this area of medicine. The emergence of innovative treatments that can be administered in an outpatient setting led to the development of new day-care units across the country, where nurses play an important role, both in the evaluation of the disease as well as in the administration of these therapies.

Furthermore, the overall level of agreement is very

TABLE II. LEVEL OF AGREEMENT WITH THE EULAR RECOMMENDATIONS ACCORDING TO TRAINING AND WORKPLACE

Recommendation*	Level of agreement with recommendations	Nurses with training n = 24	Nurses without training n = 51	p-value	Nurses working at day care unit n=37	Nurses not working at day care unit n=38	p-value	Nurses with longer length at work‡ n=44	Nurses with shorter length at work‡ n=31	p-value
Rec 3	Mean (SD)	4.9 (0.2)	4.5 (0.8)	0.0037	4.8 (0.4)	4.4 (0.9)	0.0149	–	–	NS
	% strongly agree	96%	65%	0.036	87%	63%	0.089	–	–	NS
Rec 7	Mean (SD)	4.7 (0.9)	4.7 (0.6)	0.2193	–	–	NS	–	–	NS
	% strongly agree	88%	73%	0.026	–	–	NS	–	–	NS
Rec 1,2,4,5,6,8,9,10		–	–	NS	–	–	NS	–	–	NS

*Each recommendation is described in Table I and here referred with the number only; ‡Longer length at work defined as experience ≥2 years; shorter length at work as < 2 years.
Rec – recommendation; SD – Standard deviation; NS – non-significant

TABLE III. LEVEL OF CONFIDENCE IN THE APPLICABILITY OF THE EULAR RECOMMENDATIONS ACCORDING TO TRAINING, WORKPLACE AND WORK DURATION

Recommendation*	Level of agreement with recommendations	Nurses with training n = 24	Nurses without training n = 51	p-value	Nurses working at day care unit n=37	Nurses not working at day care unit n=38	p-value	Nurses with longer length at work‡ n=44	Nurses with shorter length at work‡ n=31	p-value
Rec 2	Mean (SD)	3.6 (1.4)	3.2 (1.1)	0.1023	–	–	NS	–	–	NS
	% complete confidence	39%	8%	0.026	–	–	NS	–	–	NS
Rec 3	Mean (SD)	3.9 (1.2)	3.2 (1.1)	0.0211	–	–	NS	–	–	NS
	% complete confidence	42%	10%	0.017	–	–	NS	–	–	NS
Rec 4	Mean (SD)	–	–	NS	2.9 (1.4)	3.6 (1.1)	0.0510	–	–	NS
	% complete confidence	–	–	NS	8%	26%	0.044	–	–	NS
Rec 7	Mean (SD)	4.6 (0.6)	3.7 (1.0)	0.0002	4.3 (1.0)	3.7 (0.9)	0.0012	4.3 (0.8)	3.6 (1.1)	0.0059
	% complete confidence	65%	26%	0.008	56%	21%	0.004	49%	22%	0.029
Rec 8	Mean (SD)	–	–	NS	–	–	NS	4.3 (0.8)	3.6 (1.3)	0.0190
	% complete confidence	–	–	NS	–	–	NS	50%	30%	0.084
Rec 9	Mean (SD)	4.2 (1.0)	3.4 (1.1)	0.0031	–	–	NS	–	–	NS
	% complete confidence	44%	17%	0.041	–	–	NS	–	–	NS
Rec 10	Mean (SD)	3.8 (1.4)	3.1 (1.2)	0.0162	–	–	NS	–	–	NS
	% complete confidence	42%	11%	0.019	–	–	NS	–	–	NS
Rec 1,5,6		–	–	NS	–	–	NS	–	–	NS

*Each recommendation is described in Table I and here referred with the number only; ‡Longer length at work defined as experience ≥2 years; shorter length at work as < 2 years.
Rec – recommendation; SD – Standard deviation; NS – non-significant

high, despite the fact that most Portuguese nurses work in partial dedication to rheumatology and have no specific training in this area. The highest level of agreement was observed among nurses with specific training and working at the day-care unit. Also the highest level of confidence with the applicability of the recommendations was observed among nurses with rheumatology training, highlighting the importance of training for future commitment.

Nurses working in rheumatology are aware that training is essential to improve their skills. Those with training have the opportunity to apply the knowledge obtained and to be an integral part of the multidisciplinary team. In line with this, recommendation 8, on the continuous education of nurses, achieved the highest level of agreement, and nurses with a longer work experience in rheumatology were more confident in its applicability.

Nurses may have an important role in the first contact (eg. by telephone) with patients dealing with an urgent situation. In rheumatology, helplines are valued by patients and can provide clinical advice, emotional support and be used to deliver additional interventions at the time when they are most needed by patients[8-10]. The higher agreement of both nurses with training in rheumatology and nurses working at the day-care unit with recommendation 3 (on nurse-led telephone services) highlights the importance of training and clinical experience for providing these services. Moreover, those with specific rheumatology training strongly agree that nurses should provide care based on protocols and guidelines according to national and local contexts, which emphasizes the fact that training leads to a more evidence-based practice.

Our study has some limitations. The fact that we did not address the reasons for lack of agreement or of confidence in the implementation of the recommendations does not substantiate the results. However, we did not want to have a long questionnaire and increase the rate of non-responses. The study population had not been previously identified as a group and was not much used to working together. Fortunately, it was pleasant to verify the engagement of nurses in this study and especially in the matter of implementing the recommendations in our country and to conclude that promising and nice collaborations among Portuguese rheumatology nurses will likely follow from this initial study. This was an additional benefit of this study.

Another aspect is the fact that we only inquired nurses and in order to implement these recommendation

other interveners, particularly those that have the power of decision on this matter (eg. administration bodies of hospitals), need to be involved. More research into this area is warranted.

The fact that nursing specialty in rheumatology does not exist in Portugal limits nursing actions in our country. Nurses are restricted to willingness of rheumatologists who work with them, to teach and let the nurse develop their role for the benefit of the patient. We hope that these recommendations and this study resulting in the creation of a working group of rheumatology nurses will create the basis for an improvement in the development and recognition of nurses in the area of rheumatology.

CONCLUSION

In conclusion, there is a higher level of agreement with the EULAR recommendations for the role of the nurses in the management of patients with CIA, despite the fact that most of the nurses work in a regimen of partial dedication in rheumatology and have no specific training in this area.

The highest level of agreement was observed among nurses working at the day care unit and with specific training, and the lowest level of confidence with the applicability of the recommendations among nurses without rheumatology training, highlighting the importance of training for future commitment.

We hope that Nursing Specialty in Rheumatology will become a reality in our country because this has been the willingness of half of the nurses participating in this survey.

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