<https://doi.org/10.47660/CBR.2020.17015>

IMPACT OF EDUCATION ON PAIN AND QUALITY OF LIFE OF PATIENTS WITH RHEUMATOID ARTHRITIS - A PILOT STUDY

Ana Leticia Fontes de Oliveira Marcelino¹, Lorena Costa Duval Borges², Lidia Assis Chaves², Caio Carvalhais Chaves¹, João Victor de Pinho Costa¹, Anderson Ramos Lisboa¹, Urias Paulo Furquim Junior³, Tamires Rodrigues Pimentel da Silva¹, Vivian Guerra de Faria¹, Laura Cristine Carmo da Silva¹, Liliame Moraes Amara¹, Junia Amorim Andrade¹, Ricardo Cruz Lage¹, Maria Raquel da Costa Pinto¹, Maria Fernanda Brandao Resende Guimarães¹, Adriana Maria Kakehasi¹, Débora Cerqueira Calderaro^{1*}

1. Universidade Federal de Minas Gerais, Belo Horizonte (MG), Brazil. 2. Centro Universitário de Belo Horizonte, Belo Horizonte (MG), Brazil.

3. Universidade Estadual do Rio de Janeiro (RJ), Brazil.

*Corresponding author: dccalderaro@gmail.com

BACKGROUND

Rheumatoid arthritis (RA) is an autoimmune, systemic disease characterized by chronic peripheral synovitis and extra-articular manifestations. It can lead to a decrease in functional independence, work capacity, and quality of life, partly due to pain and joint deformities. To minimize these functional losses, in addition to drug treatment, rehabilitation and patient education measures are necessary. Group intervention models have been suggested as a good strategy in the education of these patients.

METHODS

Groups of 8 to 12 patients were conducted in weekly meetings in sessions lasting 2 hours/week for 12 weeks, on the university hospital from August 2018 to June 2019. Educational actions were carried out through projected theoretical expositions [informative classes about the disease, its treatment, joint protection measures (JP), energy conservation (EC), and therapeutic exercises]. Practices with collective and individual orientations were also performed. In the first and last meetings of the group, the perception of pain reported by the patient on a visual analog scale (VAS pain) and the quality of life assessed by the descriptive system in three levels of five dimensions of EuroQol (EuroQoL5D3L) and its visual scale were evaluated analog (EQ-VAS).

RESULTS

In this analysis, 15 participants from the orientation groups, with participation in the meetings exceeding 80%, were included. Fourteen patients (93%) were female, with a mean age (SD) of 61.3 (9.3) years and mean time (SD) of RA duration of 19.9 (10.3) years. The majority (93%) were using RA-modifying drugs, but the median DAS-28-PCR (3.07) showed moderate RA activity. Thirteen (87%) patients already had joint deformities in their hands due to RA. After participation in the groups, there was a tendency to reduce pain and improve quality of life, as assessed by the EQ-5D-3L index and EQVAS, without statistical significance ($p > 0.05$). Despite the low number of patients included in this pilot study, a significant improvement was observed with the EQ-5D-3L domain regarding personal care ($p = 0.046$). During their participation in the groups, all patients reported the adoption of EC or JP measures in their daily routine and great satisfaction with the activities developed.

CONCLUSION

Patient education aims to increase the patients' knowledge about their disease and make them take a more active role in their treatment. The participation of RA patients in education groups was well accepted and contributed to the improvement in their self-perception of pain and quality of life.

ACKNOWLEDGMENTS

We thank the multidisciplinary team at the Clinics Hospital of the Federal University of Minas Gerais (EBSerH/HC-UFMG) for their support.

FUNDING

Programa de Apoio a Doutores recém-contratados 2019 – Universidade Federal de Minas Gerais.

REFERENCES

Borges et al. Impacto da educação na saúde de pacientes com artrite reumatoide – Estudo piloto. Cadernos de Terapia Ocupacional da USP. Forthcoming.

Noordhoek J, Loschiavo FQ. Intervenção da terapia ocupacional no tratamento de indivíduos com doenças reumáticas Utilizando a Abordagem da Proteção Articular. Rev Bras Reumatol. 2005;45(4):242–44. <https://doi.org/10.1590/S0482-50042005000400008>

Noordhoek J, Matias FM. Cartilha de Orientação aos Indivíduos Acometidos por Doenças Reumáticas. Belo Horizonte: Editora Gráfica Silveira; 2003.

Table 1. Characteristics of the patients included in this pilot study.

Female gender*	14 (93%)
White color*	3 (20%)
Age (years)**	61.27 (9.25)
Monthly family income&	2.0 (1.26)
RA duration (years)**	19.93 (10.31)
Positive RF ¹	9 (69%)
ACPA positive ²	5 (62,5%)
Joint deformities in hands* [#]	13 (87%)
Radiographic change in hands* ³	11 (100%)
DAS28-CRP ⁴	3.04 (1.7)
Prednisone use*	3 (20%)
Use of disease-modifying drugs*	14 (93%)

RA: Rheumatoid arthritis. RF: rheumatoid factor. ACPA: anticitrullinated protein antibody. DAS28-PCR: Disease Activity Score using a 28-joint count and C-reactive protein. *Boutonniere or swan neck deformities of fingers, ulnar deviation of the metacarpophalangeal joints or Z-shaped deformity of the thumbs. ¹Results for the rheumatoid factor were available for the 13 patients. ²The ACPA result was available for 8 patients. ³Description of radiographs of the hands were reported in the medical records of 11 patients. The presence of erosions or juxta-articular rarefaction were considered suggestive of RA. ⁴Absolute value (%). **Average (DP). &Median (interquartile range).

Source: BORGES, LCD; 2020.

Table 2. Comparative analysis of included variables at the beginning (T0) and after completion of participation at the groups (T1).

Variable	T0	T1	P-value
Pain VAS (mm)**	54.58 (30.26)	42.5	0.13
EQ-5D-3L**	0.620 (0.174)	0.631 (0.235)	0.28
EQ5D Mobility ⁴	2.0 (1.0)	2.0 (1.0)	1.0
EQ5D Self-care ⁴	2.0 (1.0)	1.0 (1.0)	0.046*
EQ5D Usual activities ⁴	2.0 (1.0)	2.0 (1.0)	0.32
EQ5D Pain/Discomfort ⁴	2.0 (1.0)	2.0 (1.0)	0.56
EQ5D Anxiety/depression ⁴	2.0 (1.0)	2.0 (1.0)	1.0
EQ5D VAS**	70.42 (17.1)	73.33 (18.25)	0.25