were under immunosuppressive therapy and 60% of them received biological treatment. 20% of patients had clinical activity data. The average of global VAS was 12 (0–100) and the average of VAS pain was 0.9 (0–100). The average of initial PEDSQL 4.0 was 80.7 (0–100) and the PEDSQL 4.0 at three months was 74.4. At the end of the workshops, 100% of parents and patients would recommend other patients to attend it, more than 50% of patients think that they would be able to go to medical visits without their parents and 90% of them would take responsibility for their treatments. A 90% of patients think that workshops have helped to improve their relationship with their rheumatologist and 60% of them have improved their knowledge about the disease. Regarding to physical activity leves, 30% of the patients have increased it compared to baseline. More than 50% of parents have observed a positive attitude change towards the disease after the program.

Conclusions: Transition programs are important for the transfer to be effective throughout the involvement of adolescent, who takes responsibility for his/her disease and also to ensure their psychosocial needs are met. Rheumatologists must be ready to cover these needs with the support of other specialists. Our experience with the program was very positive since most of the patients improved their knowledge about the disease and its autonomy concerning their medical consultations and treatments, being very satisfied with the contents of the workshops.

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AB1190 BEHAVIOR AND TRENDS IN COLOMBIAN PATIENTS WITH RHEUMATIC DISEASES RELATED TO THE TECHNOLOGICAL TOOLS IN CONSULTATION OF RHEUMATOLOGY

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Background: In the last decades the internet has changed the way of communication with patients using email, social media and other technological tools, as a complement to the consultation. The development of websites and electronic history are part of these tools that have come to change communication with the patient.

Objectives: To analyze the behavior and trends of Colombian patients with rheumatic diseases related to use electronic tools.

Methods: We analyzed 425 patients between September 2015 and December 2016, who attended to consultation at Country Medical Center. Everyone was provided the website http://www.dra-mconstanzalatorre-reumatologa.com/. This website was developed by Octesoft (http://www.octesoft.com/), company specialized in development website and software. In this website have general information the clinic, access, schedules, glossary, news, medical information and can request online appointment

Results: We included 425 patients with rheumatic diseases, 85.5% female, with an average age of 52.5 years old. 95% lived in urban areas. 92% had internet access. 80% had smart phone. They were stratified by educational level, finding that 70% had college level. And by age groups it was found that patients between 30 and 50 years old in 72% of cases used the electronic way to request the appointment or ask questions. Patients between 18 to 29 years old prefer social media. Patients over 60 years of age preferred to use the telephone. The reasons for using the online appointment were: easy access at any time 84% tool speed 10%. Difficulty for the use of the telephone at work 2%. Others 4%. When patients communicate via email 90% of the questions are related to requesting the appointment.

During this period the website had 3860 views. With a progressive increase from 60 to 538, with an average of 227, with the highest number of visits between November and December. The patients showed satisfaction with the use of technological tools by 89%.

There is no relationship with the use of technological tools with other factors such as gender, rheumatic disease, other diseases or job.

Conclusions: In this study we find that patients gradually and progressively adopt the use of other tools for communication different from conventional, such as web site or email in the request of their appointments and in the communication with rheumatologist. We found that the main factors for adopting these changes are the group of age, especially between 30 to 50 years old and the level of education, when the level of study is university, tend to use on-line communication. It is important to give different alternatives of communication to patients according to their characteristics.

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AB1191 ANALYSIS OF FACTORS RELATED TO THE LEARNING OF RHEUMATOLOGY BY TRAINING DOCTORS OF OTHER SPECIALTIES

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Background: Many doctors in training of other specialities make a monthly rotation in the rheumatology unit, but usually no formal assessment of the skills and knowledge acquired is performed.

Objectives: To know which factors are related to learning of Rheumatology skills by training doctors (MIR) of other specialties rotating in spanish Rheumatology units.

Methods: An online platform for the evaluation of the knowledge of Rheumatology has been developed (REUMEVAL, see www.reumeval.com). It contains a set (DB) of 300 multiple-choice questions developed by staff rheumatologists on 10 topics of general interest. The set questions passed a Delphi round and 15% of them were replaced by more appropriate ones.

Each MIR that goes to perform a rotation in a teaching Rheumatology Unit (REU) is offered to participate with two tests of 30 questions randomly extracted from the DB. The first test is done just arriving at REU, assessing the basic knowledge that was obtained in the university. At the end of the rotation in REU, usually 30 days, a second test is performed, assessing the increase of knowledge achieved.

Results: As of December 2016, 384 tests were carried out by 216 physicians training in 14 hospitals of the Valencian region in Spain Of these, 166 (77%) completed both tests. 74% were in training for family medicine (MFC). The mean score of the 1st test was 5.59 (out of 10 points), and the second test was 6.55 points, with an average increase of scorings of 22.4% ($p<0.001$). Men showed higher scorings than women in their 1st test (5.92 vs 5.56), but the difference was lost in the 2nd test (6.79 vs 6.47). Younger residents (ages 20–30 years) had a 1st higher score than those aged 30–40 or$>$40 years (5.8 vs 5.2 vs 5.1 respectively) but were similar in the 2nd test (6.6 Vs 6.3 vs. 6.8). By nationality, Spaniards had higher initial scores than foreigners (5.78 vs 4.91, $p<0.01$) but there were no differences in the second test (6.55 vs 6.49). For specialties, dermatology, internal medicine and RHB had initial scores higher than MFC (7.3 - 6.1 - 6.3 vs. 5.4), but in the second test there were no significant differences.

Conclusions: The level of knowledge in Rheumatology of the residents who start a training rotation in this specialty is moderate, with an average of 5.59 points out of 10 possible. At the end of the rotation their scores increased an average of 22%, which shows a significant improvement but still not very high. Several factors were related to basic knowledge scores but lost significance in the final test, reflecting appropriate improvements in knowledge in all subgroups.

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AB1192 NATIONAL BAROMETER TO ASSESS THE EMOTIONAL ASPECTS OF PATIENTS WITH RHEUMATOID ARTHRITIS. OPINAR PROJECT

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Background: The WHO defines health as the state of physical, psychic and social well-being. In contrast, patients with rheumatoid arthritis (RA) frequently report that treatment is directed mainly at combating physical affection and hardly anything to emotional and social aspects.

Objectives: To assess the emotional impact and degree of satisfaction with the medical care received in the patient with poor prognosis RA.

Methods: National, structured and anonymous survey of 26 questions conducted between March and July 2016. Responses were counted as percentages or as means/medians of the score given on a Likert scale from 1 to 10 (minimum and maximum, respectively). Analyzes were performed using Microsoft 2012: mean (m), standard deviation (SD), median (M), interquartile range (IQR) and statistical significance of differences (Student *t* test). The study was approved by the National Coordinator ConArtritis and the CEIC of the reference hospital.

Results: The survey was completed by 100 of 122 enrollees, 75 by telephone and 25 via email; 83 women and 17 men, with a mean age of 49.4 years (SD 12.1); from all the Spanish Autonomous Communities. 52% were considered of poor

prognosis (participant's own perception). 66.7% of self-perceived high-activity RA by patients exceeded the physician's impression; and 31.03% of the intermediate-activity. The degree of knowledge and the importance given to certain aspects of the disease in relation to the poor prognosis ranged from 8 to 9/10 in the different items analyzed. The awareness of their seropositivity against FR and ACPA was 77% and 17%, respectively. 63% consider the physical aspect more disabling, but 52% gave more value to feeling good emotionally. The mean treatment score for physical aspects was 7.07 (SD 2.52), whereas for emotional aspects was 3.39 (SD 2.57). 51.9% of self-considered poor prognosis patients believed that biological treatment was delayed and 50% related that to poorer outcome. 97% wanted to participate in the doctor's decisions, but 38% declared they had no choice. There were no statistically significant differences between the prognostic groups.

Conclusions: More than half of the patients self-reported poor prognosis. Two-thirds estimated poorer health status than physicians if their RA was of high activity; 1/3 if it was intermediate. Patients considered all assessed aspects as determinants of poor prognosis (m>8). The degree of knowledge of their condition was high, being lower for joint damage and activity and prognostic markers. The beginning of treatment with biologicals was perceived as delayed in more than half of those who declared themselves with poor prognosis and half of them related it to a worse evolution. A high percentage of patients showed low satisfaction with the emotional attention received. Most claim to be more involved in medical decisions, although more than 1/3 does not seem to be able to do so.

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AB1193 DEVELOPING THE KOREAN EDUCATIONAL NEEDS ASSESSMENT TOOL (KOREAN-ENAT) IN RHEUMATOID ARTHRITIS: A CROSS-CULTURAL VALIDATION USING RASCH ANALYSIS

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Background: The Educational Needs Assessment Tool (ENAT) is a 39-item patient-completed questionnaire designed to help patients identify and prioritize their educational needs. It was originally developed in the UK and validated in 7 rheumatic diseases including rheumatoid arthritis (RA).[1]

Objectives: This study aimed to undertake cross-cultural adaptation and validation of the ENAT in RA for use in Korea.

Methods: The study involved two main phases: (1) Cross-cultural adaptation of the ENAT from English into Korean and (2) validation of the Korean-ENAT. The first phase followed an established process of cross-cultural adaptation of self-report measures.[2] For the second phase, patients with RA completed the Korean-ENAT at the outpatient clinic of a university hospital and Rasch measurement computer program, WINSTEPS, was used to analyze the data. Fit to the model was determined by the observed data Infit and Outfit statistics (≥0.50 and ≤1.50); where a value of 1.00 suggests a perfect fit to the model expectations. The unidimensionality of the scale was determined by item (and person) separation index ≥2.00 and reliability ≥0.80.

Results: An adequate conceptual equivalence was achieved following the adaptation process. A total of 123 patients completed the Korean-ENAT. Their mean ± SD age was 46.7±12.3, disease duration 53.7±71.2 months and the majority (81.3%) were female. Thirty-five of the 39 items displayed good fit to the model. The 4 items deviating from the model had Infit and Outfit >1.50. The item separation index (5.26) and item reliability index (0.97) provided evidence for good reliability of items. All the 7 domains of the Korean-ENAT were found to fit the Rasch model. The internal consistency of the Korean-ENAT was high and unidimensionality was confirmed (Person separation index =3.41 reliability index =0.92; item separation index =16.82 and reliability index =1.00).

Table 1. Fit statistics for the Korean ENAT subscales

	Infit		Outfit		Point-biserical correlation
Subscales	MNSQ	ZSTD	MNSQ	ZSTD	PTMEA CORR.
Pain	1.31	2.30	1.40	2.80	0.75
Movement	1.00	0.10	1.01	0.10	0.85
Feelings	0.77	-1.90	0.80	-1.60	0.84
Disease	1.27	2.00	1.15	1.00	0.84
Treatments	1.30	2.20	1.21	1.40	0.85
Self-help	1.05	0.50	1.08	0.70	0.84
Support	0.75	-2.10	0.75	-2.10	0.83

MNSQ = mean-square; ZSTD = z-standardized; MNSQ between ≥0.50 and ≤1.50 for model fit.

Conclusions: Using a standard process in cross-cultural adaptation, the ENAT was adapted into Korean and Rasch analysis confirmed that the construct validity, reliability, and unidimensionality of the Korean-ENAT. The Korean-ENAT provides valid and reliable estimates of educational needs of people with RA in Korea.

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AB1194 ANTINUCLEAR ANTIBODIES ALGORITHM FOR THE PRIMARY HEALTH CARE PHYSICIANS IN CYPRUS

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Background: due to our daily clinical and laboratory practice, we realized that primary care physicians of Cyprus (public & private sector), as well as other medical specialties, are not familiar with the clinical significance of autoantibodies used to diagnose autoimmune rheumatological diseases. This resulted to an increasing number of orders for autoantibodies, which were irrelevant to the person's condition, leading to a high expenditure for tests not clinically needed, whereas the laboratory was not able to respond to the demand with the available resources (human, hardware, economic).

Objectives: (a) to persuade, through education, all the primary care physicians of Cyprus to order autoantibodies up to the point of the primary healthcare level and (b) to minimize the number of unneeded orders, as well as the expenditure, and save resources. To accomplish this target, we created an algorithm for ordering antinuclear antibodies (ANA). Mainly the primary care physicians should use the algorithm as a protocol.

Methods: we searched the literature to find (a) existing algorithms for ordering the ANA, as well as other autoantibodies that should be performed if ANA is found positive and (b) the relevant scientific evidence to guide primary care physicians while ordering ANA. In addition, we planned educational lectures for all the primary care physicians (public & private sector). Our scope was to develop an algorithm that guides the primary care physician to order antinuclear antibodies only if the person's symptoms are relevant to an autoimmune rheumatological disease.

Results: we found algorithms from different sources (university clinics, scientific societies [medical and laboratory], commercial companies producing autoantibody kits). Most of the algorithms found were focusing on the suspected disease, for which the relevant autoantibodies should be ordered. We established an algorithm targeting the primary care physicians: they should only order antinuclear antibodies if an autoimmune rheumatology disease is suspected; if ANA is negative, then an autoimmune disease does not exist and the test should never be repeated (unless there is an important reason); if ANA is positive, then the person should be sent for a consultation to a rheumatologist, who is responsible to take the medical history, examine clinically the person and decide if there is a need or not to order for any other autoantibodies, if an autoimmune rheumatology condition is still suspected. The developed algorithm was communicated (year 2014) to the primary care physicians through lectures in small teams (it was repeated in seven different teams, and captured almost all). The Cyprus Rheumatology Society acknowledged the algorithm, whereas the Health Insurance Organization, with the Ministry of Health, organized the educational part.

Conclusions: the development and establishment (years 2015–2016) of the algorithm for the ordering of antinuclear antibodies by the primary care physicians, changed their attitude towards ordering nowadays with more scientific and evidenced based criteria. This was seen on the lower numbers of orders of antinuclear antibodies within these two years.

References:

[1] the developed algorithm, with the associated text and lecture (all in pdf format), can be viewed (greek language only) and/or downloaded from http://www.hio.org.cy/gr/kko_ergkon_eksetaseon_pfy.html.

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