

**Methods:** 738 patients (age 62.0±11.1, 84% women), followed a three weeks multidisciplinary program of individual and group sessions - with physiotherapy as main focus - during the period of August 2010 to September 2016 at Skogli Health- and Rehabilitation Center, Lillehammer, Norway. 3-month follow-up: N=252 and 12-month follow-up: N=118. Data from self-reported questionnaires at T1-T4 was gathered. Paired sampled T-tests and Pearson product-moment correlation coefficients was used to analyze the data obtained, using IBM SPSS Statistics v.23.

**Instruments:**

- NRS-11 for pain and stiffness at baseline (T1), at discharge (T2), and at 3- (T3) and 12 months (T4) after discharge.
- Likert scale (1–6) for self-rated level of health at T1, T2, T3 and T4.
- Self-reported level of training frequency at T1, T3 and T4

**Results:** There was a clear mean improvement ( $p < 0.0001$ ) on all factors at T2 of moderate/large effect-size. At T3 there was a mean improvement ( $p < 0.05$ ) on all factors, except pain, of small/moderate effect size. There was a mean improvement ( $p < 0.05$ ) on self-rated level of health and training frequency at T4 of a small effect size. Worth noting is that the degree of stiffness and pain at T4 is back to T1-level.

There was a correlation ( $p < 0.05$ ) between level of training frequency and self-rated level of health (small at T1/T3, medium at T4), but no correlation between level of training frequency and level of pain or stiffness, at any time. This suggests that a higher training frequency is associated with a higher sense of health – regardless of symptom levels.

**Conclusions:** People with rheumatic disorders seem to have a very positive short term effect on all aspects after a three week intensive multidisciplinary program, but gradually return to pre-rehab levels during the following year – especially regarding symptoms like stiffness and pain. At the same time there seems to be a much slower decline in self-rated level of health – especially for those who regularly exercise. Properly randomized controlled trials are however needed to be able to draw any clear conclusions.

**Implications:** There might be a need for intensive multidisciplinary programs for rheumatic patients at intervals of less than a year, to be able to better keep the general health and function gained. Another possible implication is to implement a stronger focus on teaching rheumatic patients the necessity for an active lifestyle – including regular exercises – for them to be able to maintain their sense of general health, regardless of symptom levels.

**References:**

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**THU0732-HPR ENHANCED MANAGEMENT OF ANKYLOSING SPONDYLITIS THROUGH GUANGDONG INTERNET HOSPITAL IN CHINA: A RANDOMIZED, CONTROLLED TRIAL**

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**Background:** Ankylosing Spondylitis (AS) is a kind of common chronic disease. Guangdong Internet Hospital is China's first officially recognized network hospital and the government encourage development of telemedicine in the country. Increasing research evidences support the efficacy of telemedicine in management of chronic diseases. However, There are still few researches about AS management by using telemedicine.

**Objectives:** We here conducted a 6-month randomized, controlled trial to evaluate the feasibility and efficacy of Guangdong Internet Hospital in AS management.

**Methods:** A total of 102 AS patients were randomly divided into two groups: standard care (ST) group or standard care with Network-Enhanced Management (ST-NEM) group. NEM enhanced disease management including cognition of the disease, medication monitoring, behavioral management and psychotherapy. Individuals were assessed by using several tools at baseline and 6 months later: Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) for the disease activity, Ankylosing Spondylitis Functional Index (BASFI) for the functional limitation, the Zung Self-Rating Anxiety Scale (SAS) and the Zung Self-Rating Depression Scale (SDS) for the psychological status, Pittsburgh sleep quality index (PSQI) for the sleep quality, and SF-36 for the general health status. In addition, we made a satisfaction survey about the network platform in the management of the disease. Both group received the same medications during the period. There were no significant differences in baseline demographic and clinical characteristics between the two groups.

**Results:** After 6 month, 91 patients completed the trial. BASFI (1.75±0.73 vs. 2.04±0.69, P=0.026), SAS (28.12±3.22 vs. 39.56±4.61, P=0.022), SDS (26.51±6.34 vs. 32.12±6.34, P=0.031), PSQI (3.31±0.46 vs. 4.79±0.54, P=0.019) and SF-36 (SF-36M: 54.24±9.66 vs. 61.41±8.56, P=0.014; SF-36P: 63.42±11.08 vs. 68.98±10.46, P=0.032) were significantly lower in ST-NEM group than ST group after 6 months. There was no significant difference in BASDAI (2.66±0.91 vs. 2.75±0.75, P=0.068) between the two groups. Individuals assigned to the ST-NEM group reported significantly improvement in functional limitation, psycho-

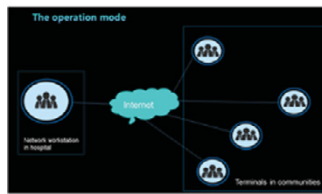


Figure 1. The operation mode of Guangdong Internet Hospital

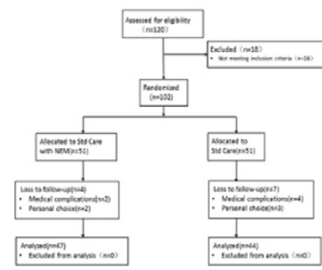


Figure 2. CONSORT Study Flow diagram

Table 1. Baseline Demographic and Clinical Characteristics of AS patients

Characteristic	ST-NEM (n=47)	ST (n=44)	Total (n=91)	
Male(n)	43	41	84	
Age(y)	Mean(SD)	27.69(5.31)	28.53(5.72)	28.10(5.49)
Disease duration(y)	4.36(5.91)	4.58(7.08)	4.36(6.94)	
B27 positive (%)	41	39	80(88.9%)	
Education Status(n)				
Junior high school	3	5	8(8.8%)	
Senior high school	23	22	45(49.5%)	
College Graduate	19	15	34(37.4%)	
Post Graduate	2	2	4(4.4%)	

n: number of cases, y: years, %: percentage, SD: standard deviation

Table 2. The primary outcomes in two groups at baseline and 6 months later

Assessing tool	Baseline		P value	6 months later		P value
	ST-NEM	ST		ST-NEM	ST	
BASDAI	5.12±1.38	5.41±1.38	0.82	2.60±0.91	2.75±0.75	0.068
BASFI	4.73±1.49	4.88±1.27	0.20	2.75±0.73	2.04±0.69	0.026
SDS	52.62±5.22	54.52±6.34	0.61	26.51±6.34	32.12±6.34	0.031
SAS	47.82±6.41	48.38±5.82	0.88	28.12±3.22	39.56±4.61	0.022
PSQI	6.71±1.13	6.83±0.96	0.40	3.31±0.46	4.79±0.54	0.019
SF-36M	54.24±9.66	48.09±9.18	0.58	54.24±9.66	61.41±8.56	0.014
SF-36P	50.43±9.13	52.63±9.48	0.31	63.42±11.08	68.98±10.46	0.032

SF-36M: SF-36 Mental Component Summary score  
SF-36P: SF-36 Physical Component Summary score

Table 3. Result of patients' satisfaction survey

Contents	Strongly agree	Agree	Not agree
It was convenient and quick to achieve disease management	40	7	0
The nurse's explanations were easily understood	40	7	0
Problems could be solved with this network platform in time	36	6	3
It was useful for disease recovery	42	5	0
My privacy was protected	43	4	0
I will keep using the network hospital in future	40	5	7
I will recommend to my family and friends	43	3	1

logical status, sleep quality and the general health status. In addition, Guangdong Internet Hospital were widely accepted by the AS patients in disease management.

**Conclusions:** Guangdong Internet Hospital showed potential feasibility and efficacy in AS management. AS patients may receive disease management through the network platform conveniently and effectively, especially those in the remote areas of the country. The results may be important for clinical practice in disease management of AS by using telemedicine.

**References:**

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**THU0733-HPR REHABILITATION IN WARM CLIMATE FOR YOUNG ADULTS WITH INFLAMMATORY RHEUMATIC DISEASE. A 12 MONTHS RANDOMIZED CONTROLLED TRIAL**

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**Background:** Rehabilitation in warm climate has long been an established non-pharmacological treatment for patients with inflammatory rheumatic disease (IRD) in Norway. It has however not been tailored to the needs of young adults, who often have different challenges than older adults with IRD.

**Objectives:** The aim of this study was to investigate if a rehabilitation program in warm climate tailored to young adults from 20 to 35 years had effect on physical function and self-management/coping, 12 months after completed intervention.

**Methods:** This was an open randomized controlled pilot trial, with a 2-group parallel design and a 1:1 allocation ratio. Patients were recruited from three different rheumatology outpatient clinics in central Norway. The intervention group received a 17 day long rehabilitation stay in Spain. The main component of the tailored intervention was intensive exercise (2–3 times per/day), individual physiotherapy (daily) and patient education. The control group received treatment as usual. The primary outcome measure was physical function assessed by the "30 second Sit to Stand test" (30sSTS, number of sit and stand during 30 seconds, higher score is better) and self-management/coping measured by the "Effective Musculoskeletal Consumer Scale" (EC17, higher score is better).

**Results:** Forty patients (mean age 27.5, 65% female) with IRD (intervention/control: 3/2 rheumatoid arthritis, 3/9 juvenile idiopathic arthritis, 4/5 psoriatic arthritis, 8/3 ankylosing spondylitis and 2/1 polyarthritis) were randomized. 19 out of 20 patients completed the intervention. At twelve months follow up there were 3 patients lost to follow up from the intervention group, and 2 in the control group. Patients in the intervention group had a significant improvement in the 30sSTS test 3, 6 and 12 months after completed intervention, compared to the control group (Table 1). The within group analysis showed that both groups improved at 6 and 12 months. The EC17 showed no difference between the two groups at 3, 6 or 12 months.

**Conclusions:** The results indicate that the intervention group significantly improved their physical function one year after the intervention compared to the control group, but there was no effect on self-management/coping. These results