

Reumatologisk forskning och utveckling

# The Educational Needs of Patients with Undifferentiated Spondyloarthritis validation of the ENAT and needs assessment

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#### Conclusions:

The Swedish ENAT has been validated in USpA thus enabling an accurate estimation of the educational needs of people with USpA in Sweden.

Women and patients with higher disease activity are likely to have high levels of educational needs and these groups should be targeted in educational interventions for people with USpA.



# Background:

The educational needs of people with undifferentiated spondyloarthritis (USpA) have not been well studied. The educational needs assessment tool (ENAT) has been translated into Swedish and validated in other rheumatic diseases but not USpA.<sup>1</sup>

## **Objectives:**

To validate the ENAT questionnaire in people with USpA and to study their educational needs.

#### Methods:

A random sample of patients with USpA was recruited from a hospital register. USpA was diagnosed according to the International Classification of Disease, ICD-10 (M46.0, M46.1, M46.8, and M46.9).<sup>2</sup> The study was approved by the Regional Ethics Board and all included patients signed an informed consent.

We used a postal survey to collect data on disease activity (BASDAI) and educational needs (Swedish version of the ENAT). The data was then utilized to assess the construct validity, internal consistency, unidimensionality and response bias of the ENAT using Rash analysis.

Given fit to the Rasch model, we transformed the ENAT ordinal scores into interval logit-based scores before deploying descriptive and inferential statistics.

Finally, we categorised the data by gender, age (median split) and disease activity (BASDAI split at 4) and assessed differences between patient subgroups using the student's t-test.

### Results:

Complete responses were derived from 77 patients (48 women), mean (SD) age 50 (12) years, disease duration was 16 (11) years, BASDAI 4.9 (1.9) and BASFI 3.1 (2.3).

- When used as a 7-subscale questionnaire, the ENAT satisfied the requirements of Rasch model (Chi Square= 11.488; p = 0.119) including strict unidimensionality.
- The mean (SD) ENAT scores for patients with USpA was 86 (32). Women reported higher needs than men in the domains of pain, movement and self-help.
- Higher disease activity (BASDAI >4) was associated with higher educational needs.
   There was no difference in educational needs between age groups.

**Table.** Educational needs in people with USpA; data presented as mean (SD) in ENAT domain scores and ENAT total scores.

Men	Women	p	Age	Age	p	<b>BASDAI</b>	<b>BASDAI</b>	p
			18-50 yrs	>50 yrs		0-4	>4	
n=29	n=48		n=42	n=35		n=24	n=53	
10.1 (6.0)	13.1 (6.8)	0.05	12.5 (7.1)	11.5 (6.1)	0.52	9.4 (5.8)	13.1 (6.7)	0.02
9.9 (5.7)	13.0 (5.5)	0.02	11.6 (6.0)	12.1 (5.3)	0.73	9.1 (5.7)	13.0 (5.4)	0.005
8.7 (4.4)	10.6 (4.7)	0.08	9.8 (4.4)	10.0 (5.0	0.82	8.4 (4.6)	10.6 (4.6)	0.06
15.2 (7.9)	17.8 (7.3)	0.14	16.2 (7.6)	17.6 (7.7)	0.43	16.1 (7.9)	17.1 (7.5)	0.62
12.0 (7.8)	14.0 (8.0)	0.31	12.6 (8.0)	14.1 (7.8)	0.42	10.0 (6.6)	14.8 (8.1)	0.01
14.1 (5.0)	17.0 (5.8)	0.03	16.3 (6.0)	15.4 (5.2)	0.50	14.7 (6.0)	16.5 (5.4)	0.18
7.3 (4.3)	8.1 (4.1)	0.41	7.5 (4.0)	8.2 (4.4)	0.52	6.0 (4.2)	8.7 (3.9)	0.008
78.3	91.5	0.10	84.3	89.3	0.52	73.7	92.6	0.02
(33.1)	(30.9)		(31.6)	(33.2)		(29.4)	(31.9)	
	n=29 10.1 (6.0) 9.9 (5.7) 8.7 (4.4) 15.2 (7.9) 12.0 (7.8) 14.1 (5.0) 7.3 (4.3) 78.3	n=29       n=48         10.1 (6.0)       13.1 (6.8)         9.9 (5.7)       13.0 (5.5)         8.7 (4.4)       10.6 (4.7)         15.2 (7.9)       17.8 (7.3)         12.0 (7.8)       14.0 (8.0)         14.1 (5.0)       17.0 (5.8)         7.3 (4.3)       8.1 (4.1)         78.3       91.5	n=29       n=48         10.1 (6.0)       13.1 (6.8) <b>0.05</b> 9.9 (5.7)       13.0 (5.5) <b>0.02</b> 8.7 (4.4)       10.6 (4.7)       0.08         15.2 (7.9)       17.8 (7.3)       0.14         12.0 (7.8)       14.0 (8.0)       0.31         14.1 (5.0)       17.0 (5.8) <b>0.03</b> 7.3 (4.3)       8.1 (4.1)       0.41         78.3       91.5       0.10	18-50 yrs         n=29       n=48       n=42         10.1 (6.0)       13.1 (6.8)       0.05       12.5 (7.1)         9.9 (5.7)       13.0 (5.5)       0.02       11.6 (6.0)         8.7 (4.4)       10.6 (4.7)       0.08       9.8 (4.4)         15.2 (7.9)       17.8 (7.3)       0.14       16.2 (7.6)         12.0 (7.8)       14.0 (8.0)       0.31       12.6 (8.0)         14.1 (5.0)       17.0 (5.8)       0.03       16.3 (6.0)         7.3 (4.3)       8.1 (4.1)       0.41       7.5 (4.0)         78.3       91.5       0.10       84.3	18-50 yrs >50 yrs         n=29       n=48       n=42       n=35         10.1 (6.0)       13.1 (6.8)       0.05       12.5 (7.1)       11.5 (6.1)         9.9 (5.7)       13.0 (5.5)       0.02       11.6 (6.0)       12.1 (5.3)         8.7 (4.4)       10.6 (4.7)       0.08       9.8 (4.4)       10.0 (5.0         15.2 (7.9)       17.8 (7.3)       0.14       16.2 (7.6)       17.6 (7.7)         12.0 (7.8)       14.0 (8.0)       0.31       12.6 (8.0)       14.1 (7.8)         14.1 (5.0)       17.0 (5.8)       0.03       16.3 (6.0)       15.4 (5.2)         7.3 (4.3)       8.1 (4.1)       0.41       7.5 (4.0)       8.2 (4.4)         78.3       91.5       0.10       84.3       89.3	18-50 yrs >50 yrs         n=29       n=48       n=42       n=35         10.1 (6.0)       13.1 (6.8)       0.05       12.5 (7.1)       11.5 (6.1)       0.52         9.9 (5.7)       13.0 (5.5)       0.02       11.6 (6.0)       12.1 (5.3)       0.73         8.7 (4.4)       10.6 (4.7)       0.08       9.8 (4.4)       10.0 (5.0)       0.82         15.2 (7.9)       17.8 (7.3)       0.14       16.2 (7.6)       17.6 (7.7)       0.43         12.0 (7.8)       14.0 (8.0)       0.31       12.6 (8.0)       14.1 (7.8)       0.42         14.1 (5.0)       17.0 (5.8)       0.03       16.3 (6.0)       15.4 (5.2)       0.50         7.3 (4.3)       8.1 (4.1)       0.41       7.5 (4.0)       8.2 (4.4)       0.52         78.3       91.5       0.10       84.3       89.3       0.52	18-50 yrs >50 yrs         0-4 n=24           n=29         n=48         n=42         n=35         n=24           10.1 (6.0)         13.1 (6.8)         0.05         12.5 (7.1)         11.5 (6.1)         0.52         9.4 (5.8)           9.9 (5.7)         13.0 (5.5)         0.02         11.6 (6.0)         12.1 (5.3)         0.73         9.1 (5.7)           8.7 (4.4)         10.6 (4.7)         0.08         9.8 (4.4)         10.0 (5.0         0.82         8.4 (4.6)           15.2 (7.9)         17.8 (7.3)         0.14         16.2 (7.6)         17.6 (7.7)         0.43         16.1 (7.9)           12.0 (7.8)         14.0 (8.0)         0.31         12.6 (8.0)         14.1 (7.8)         0.42         10.0 (6.6)           14.1 (5.0)         17.0 (5.8)         0.03         16.3 (6.0)         15.4 (5.2)         0.50         14.7 (6.0)           7.3 (4.3)         8.1 (4.1)         0.41         7.5 (4.0)         8.2 (4.4)         0.52         6.0 (4.2)           78.3         91.5         0.10         84.3         89.3         0.52         73.7	18-50 yrs         0-4         >4           n=29         n=48         n=42         n=35         n=24         n=53           10.1 (6.0)         13.1 (6.8)         0.05         12.5 (7.1)         11.5 (6.1)         0.52         9.4 (5.8)         13.1 (6.7)           9.9 (5.7)         13.0 (5.5)         0.02         11.6 (6.0)         12.1 (5.3)         0.73         9.1 (5.7)         13.0 (5.4)           8.7 (4.4)         10.6 (4.7)         0.08         9.8 (4.4)         10.0 (5.0)         0.82         8.4 (4.6)         10.6 (4.6)           15.2 (7.9)         17.8 (7.3)         0.14         16.2 (7.6)         17.6 (7.7)         0.43         16.1 (7.9)         17.1 (7.5)           12.0 (7.8)         14.0 (8.0)         0.31         12.6 (8.0)         14.1 (7.8)         0.42         10.0 (6.6)         14.8 (8.1)           14.1 (5.0)         17.0 (5.8)         0.03         16.3 (6.0)         15.4 (5.2)         0.50         14.7 (6.0)         16.5 (5.4)           7.3 (4.3)         8.1 (4.1)         0.41         7.5 (4.0)         8.2 (4.4)         0.52         6.0 (4.2)         8.7 (3.9)           78.3         91.5         0.10         84.3         89.3         0.52         73.7         92.6





2. Classification of diseases, WHO, http://www.who.int/classifications/icd/en/ acessed 170103.







