

# Physical activity in people with axial spondyloarthritis and the impact of attitudes, barriers and facilitators

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## CONCLUSION

To support lifestyle changes, health professionals need to discuss attitudes and barriers to physical activity with their clients.

Barriers seem to be of greater importance than facilitators of any kind.

## BACKGROUND

Barriers such as high disease activity, fatigue, pain, stiffness, physical exertion and lack of time have a negative impact on physical activity level in people with axial Spondyloarthritis (axSpA), while more time is a facilitator. In addition, an intrinsic drive to exercise is an important motivator, guided by personal interest and enjoyment in exercise.

## OBJECTIVE

To study the association between self-reported level of physical activity and self-perceived health, quality of life, attitudes, barriers to and facilitators of physical activity in people with axSpA.

## METHODS

In 2018, members from the Danish Patient Association for Spondyloarthritis were invited to participate in an on-line survey. The questionnaire included diagnosis, health, quality of life (QoL), level of physical activity, attitudes, barriers and facilitators to physical activity.

Logistic regression analysis was applied to study associations between level of physical activity and attitudes, barriers, facilitators and self-perceived health.

## RESULTS

445/972 members (46%) completed the questionnaire (Table 1). 23% were physically active for at least 30 minutes on a moderate intensity level  $\leq$  1 day/week, 36% 2-3 days/week and 41% 4-7 days/week.

Responders who were physically active  $\geq$  2 days/week had more positive attitudes to physical activity, disagreed more often with suggested barriers, had better self-perceived health and QoL compared with those who reported a low physical activity level ( $\leq$  1 day/week) (Table 2 and Figure 1).

In a multivariate model, high physical activity was associated with a positive attitude ('physical activity is ok', OR 5.44, 95%CI [1.24 - 23.87], and 'I like physical activity', OR 14.22, 95%CI [3.34 - 60.61]), and higher disagreement with barriers, OR 1.12, 95%CI [1.07 - 1.17]).

**Table 2.** Self-reported health information stratified into three groups based on physical activity (PA) level

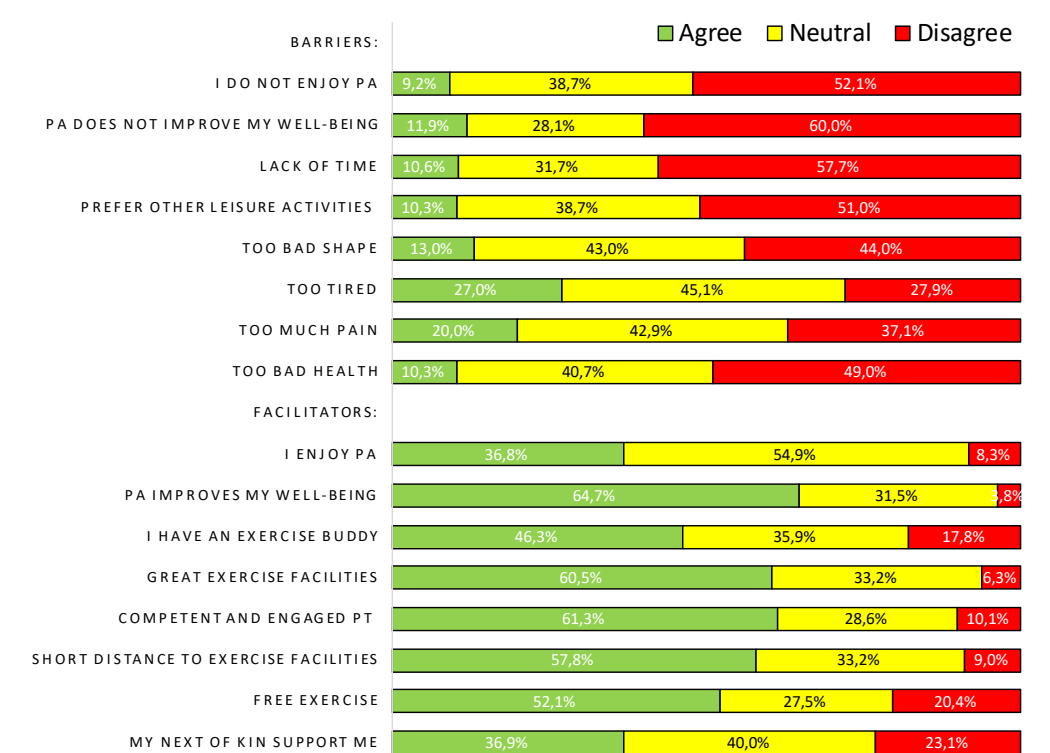
	All N = 445	30 min. PA $\leq$ 1 time/week N = 101	30 min. PA 2-3 times/week N = 162	30 min. PA $\geq$ 4 times/week N = 182	p-value
Age, median (range)	56 (22-85)	53 (22-85)	56 (28-84)	59 (24-84)	0.068
Gender, n (%)					
Men	241 (54)	56 (23)	87 (36)	98 (41)	0.957
Women	204 (46)	45 (22)	75 (37)	84 (41)	
Self-perceived health, n (%)					
Poor	112 (25)	46 (41)	35 (31)	31 (28)	<0.001
Fair	196 (44)	34 (17)	79 (40)	83 (43)	
Good	137 (31)	21 (15)	48 (35)	68 (50)	
Quality of life (0-100mm), median (range)	71 (0-100)	59 (0-100)	72 (7-100)	75 (0-100)	0.003
Sum barriers (8-56**)	38 (10-56)	32 (10-54)	37 (16-56)	43.5 (23-56)	<0.001
Sum facilitators (8-56**)	23 (8-48)	24 (10-48)	23 (10-46)	21.5 (8-43)	0.001
Attitude towards PA, n (%)					
I do not care/do not know	34 (07.6)	23 (67.6)	8 (23.5)	3 (08.8)	<0.001
It is OK	154 (34.6)	46 (29.9)	64 (41.6)	44 (28.6)	
I like PA	257 (57.8)	32 (12.5)	90 (35.0)	135 (52.5)	

\*\*8 = strongly agree to 56 = strongly disagree

**Table 1.** Characteristics of patients with axSpA who responded to the questionnaire

	All N = 445	Men N=241 (54%)	Women N=204 (46%)
Age, years, median (range)	56 (22-85)	62 (22-85)	52 (22-77)
Married/cohabiting, n (%)	325 (73.0)	181 (75.1)	144 (70.6)
Employed, n (%)	254 (57.1)	116 (48.1)	138 (67.6)
Ever smokers, n (%)	231 (51.9)	136 (56.4)	95 (46.6)
Cardiovascular disease, n (%)	114 (25.6)	77 (32.0)	37 (18.1)
Other comorbidities, n (%)	311 (70.0)	164 (68.0)	147 (72.1)
Any medication, n (%)	395 (88.8)	212 (88.0)	183 (89.7)
NSAIDs, n (%)	101 (22.7)	55 (22.0)	48 (23.5)
TNF-inhibitor therapy, n (%)	173 (38.9)	91 (37.8)	82 (40.2)
Paracetamol, n (%)	179 (40.2)	89 (36.9)	90 (44.1)
Opioids, n (%)	64 (14.4)	19 (07.9)	45 (22.1)

NSAID=Non steroidal anti inflammatory drug



**Figure 1.** Percentage agreement with barriers and facilitators for physical activity, PA: Physical activity, PT: Physiotherapist