

# Associations between fatigue and daily, physical and emotional functioning among patients with sarcoidosis

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## Introduction

Sarcoidosis is a chronic granulomatous disease that can affect all organs of the body<sup>1</sup>. The lungs are the organs most often affected (90% of cases)<sup>2</sup>. **Intense and disabling fatigue is the symptom most often described by patients.** This fatigue can become chronic and persists even after the signs of the disease have disappeared. This can have a negative impact on patients' quality of life<sup>3</sup> in particular on three levels of functioning: physical, emotional and in the activities of daily life (ADL).

Alterations in physical functioning are characterized by a variety of painful symptoms <sup>4</sup>, respiratory<sup>5</sup>, as well as discomfort and sleep problems<sup>6</sup>. **In patients, this can induce in a reduction of physical activity leading to a general de-conditioning which contributes to an increase in perceived physical fatigue<sup>7</sup>.**

With regard to emotional functioning, patients generally report a decrease in well-being, often resulting in anxiety and depressive symptoms and significant stress<sup>8</sup>. **These aspects are also predictors of fatigue<sup>2</sup>.**

Finally, severe fatigue has repercussions on ADL<sup>7</sup>. **Patients report an impact on their social life, conflicts at work, inability to work<sup>6</sup> and to achieve their full potential<sup>3</sup>.**

The purpose of this poster is to examine the link between fatigue and these different types of functioning.

Subjects		Method	Procedure
Table 1: Gender and age (yrs) Mean ((±) SD)			
Sexe	Age (yrs)	Mean (± SD)	
Female	9	53 (±17.24)	
Male	15	47.4 (±13.93)	
Total	24	49.5 (±15.14)	

Table 2: Duration of sarcoidosis (yrs) Mean ((±) SD)

Duration (yrs) since the first symptoms	
Mean (± SD)	7.29 (±9.72)
Duration (yrs) since the diagnosis	
Mean (± SD)	5.29 (±8.44)

## Procedure

Two questionnaires were used to assess fatigue symptoms and Health status. Associations between scores were calculated using Perason 's correlations.

**The Fatigue Assessment Scale (FAS)**<sup>9</sup> is a 10 item self-report scale evaluating symptoms of chronic fatigue. The scoring is made using a five-point Likert-type scale ranging from 1 (“never”) to 5 (“always”).

**The Sarcoidosis Health Questionnaire (SHQ)**<sup>10</sup> is a 29 item self-report questionnaire measuring three health status domains: daily functioning, physical functioning and emotional functioning. The responses are represented by a seven-point Likert-type scale ranging from 1 (“all of the time”) to 7 (“none of the time”).

## Results

### Fatigue

Overall, all the patients report fatigue. The average FAS score is 31.38 ( ±9.06) which indicates severe fatigue. Note that extreme fatigue corresponds to a score of 35 and above (maximum score 50).

### Association between fatigue and health status

Overall, patients obtain an average health status of 3.97 (sd=.74 which indicates a fair health status. Association between fatigue and **emotional functioning is moderate** ( $r=-.41$  ;  $p<.05$  ; see figure 1) and **strong between fatigue and ADL** ( $r=-.70$  ;  $p<.001$  ; see figure 2). This means that the higher the level of fatigue, the poorer the emotional and ADL functioning. However, our results do not show an association between fatigue intensity and physical functioning.

Figure 1: Association between FAS and daily functioning

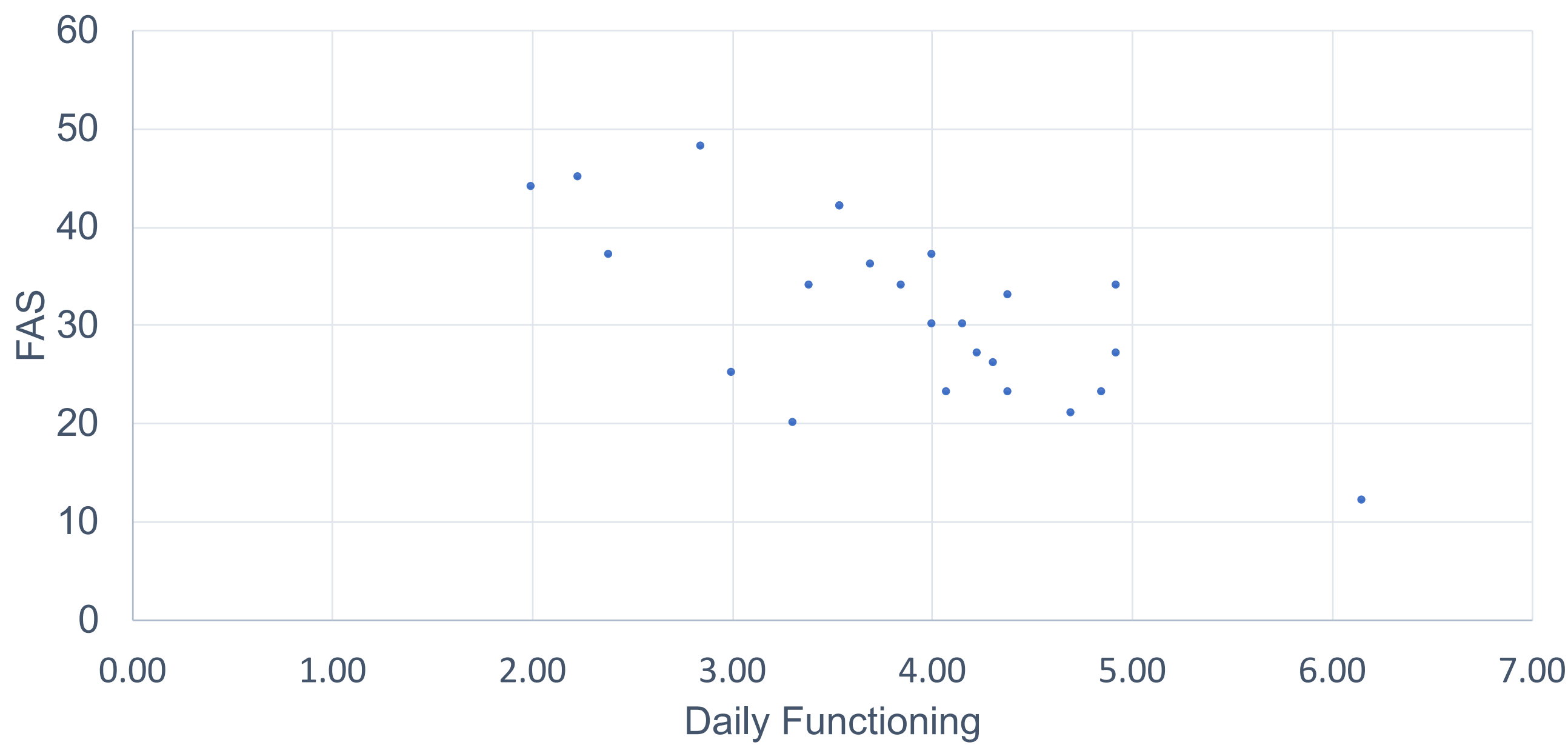
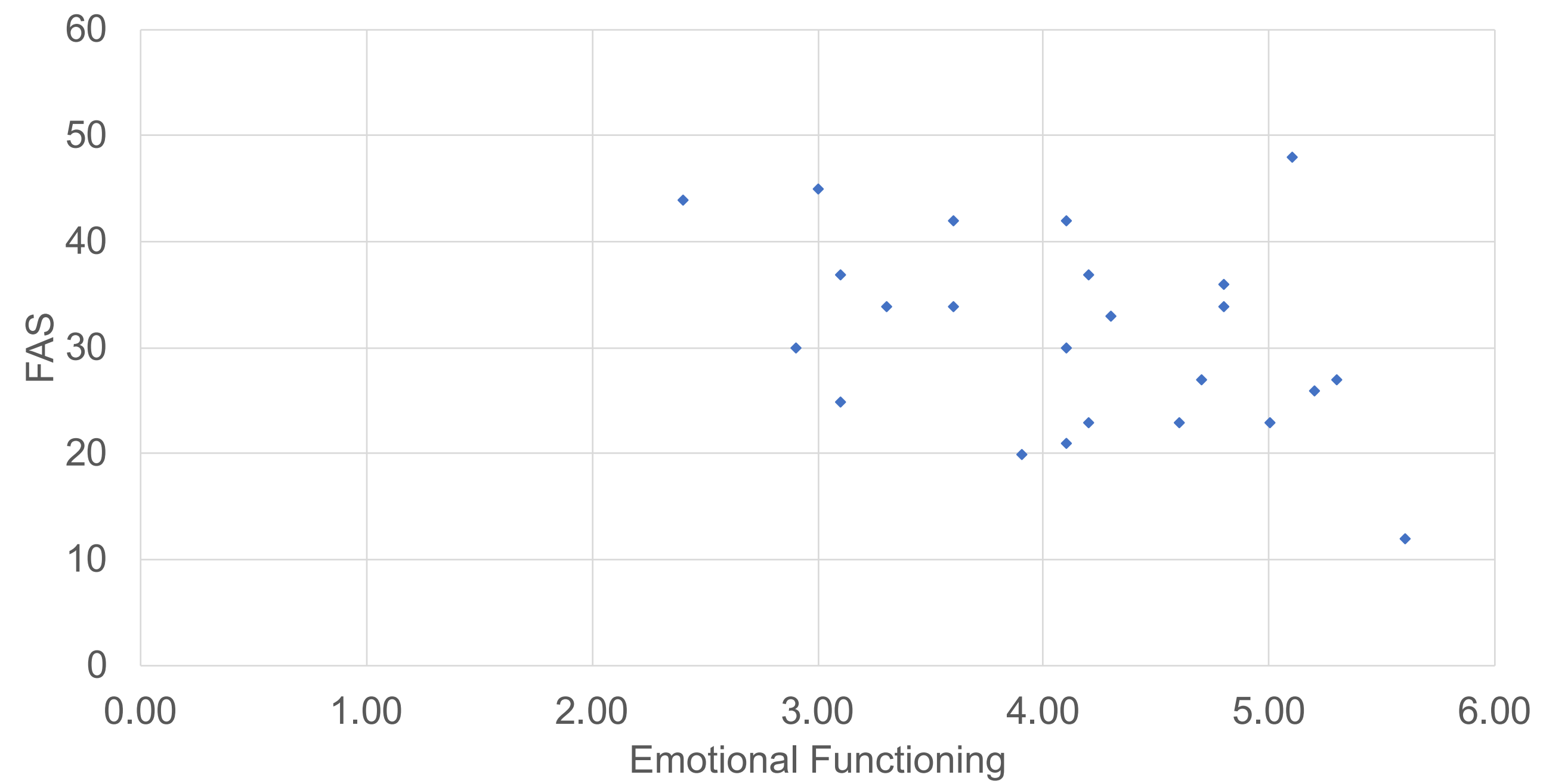


Figure 2: Association between FAS and emotional functioning



## Discussion

The fatigue reported by patients with sarcoidosis is peculiar because of its intensity but also because of the negative impact it has on emotional functioning and in the achievement of ADL.

Some patients need help and support to develop skills to deal with this situation<sup>3</sup>.

Cognitive therapies<sup>3</sup> and psychoeducation<sup>1</sup> seem to be particularly indicated for difficulties in managing the aspects related to the disease.

However, they will have to be timely tailored to each individual patient as, to a large extent, their experiences differ<sup>11</sup>.

References are available on demand, please email the authors directly.

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