

**Comment to Cognitive Behavioral Therapy Improves Physical Function and Fatigue in Mild and Moderate Chronic Fatigue Syndrome: A Consecutive Randomized Controlled Trial of Standard and Short Interventions.** Gotaas ME, Stiles TC, Bjørngaard JH, Borchgrevink PC and Fors EA (2021) *Front. Psychiatry* 12:580924. [doi: 10.3389/fpsy.2021.580924](https://doi.org/10.3389/fpsy.2021.580924)

by Nina E. Steinkopf, 25<sup>th</sup> May 2021

## Objective outcome

Although CFS/ME is a registered neurological disease, the last 30 years of research has been mainly on psychological interventions. There are few studies with biomarkers and objective outcomes which is critical in CFS/ME-research to eliminate potential experimental biases.

Unfortunately, the results of the study's objective test, VO2max, have not been reported.

Moreover, the control group was not followed up at week 52, hence there was no actual control for medium-long term effects.

## Misleading graphs

The authors conclude that CBT improves physical function and fatigue in mild to moderate CFS. However, the graphs in Figures 2 and 3 create the impression of major changes where there are only clinically modest effects.(1)

Figure 2: "Primary outcome, physical function SF-36 up to 52 weeks" shows the results in a truncated scale (from 40 to 80). The entire scale is from 0-100.

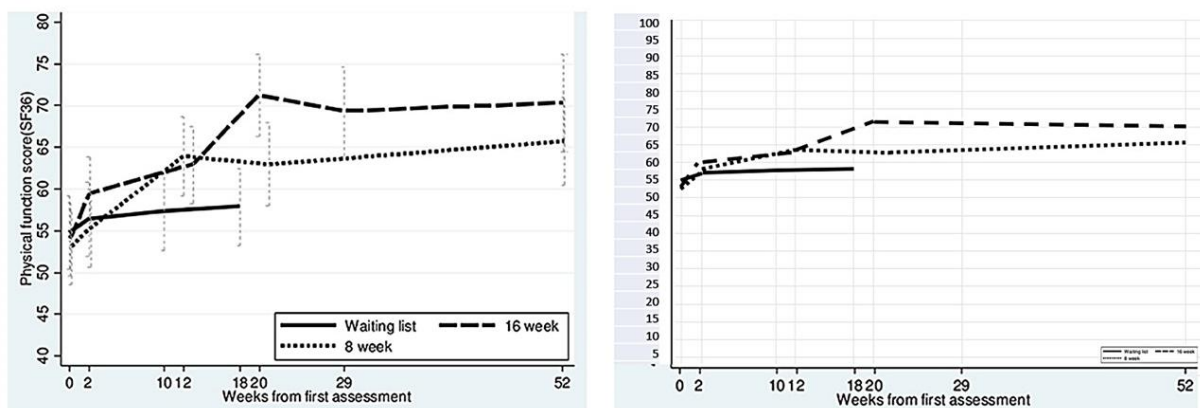
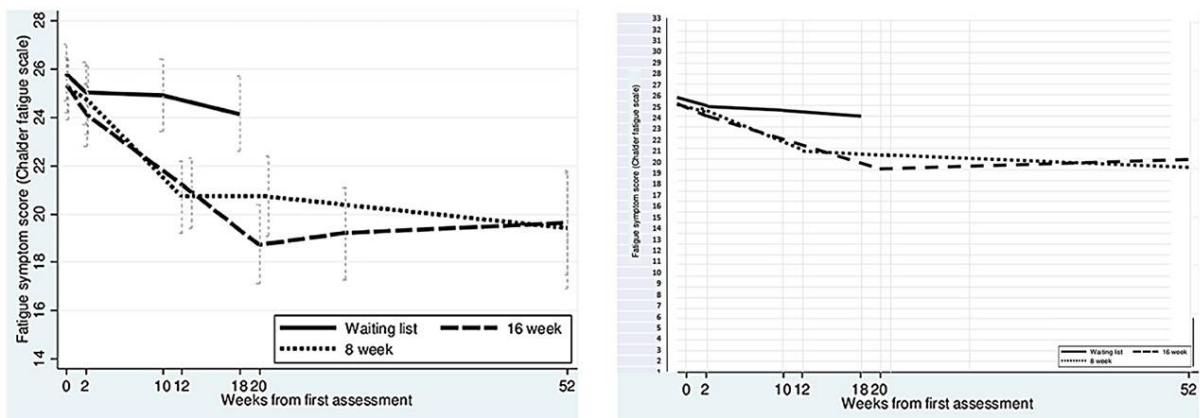


Figure 3 "Secondary outcome, Fatigue (CFQ) up to 52 weeks" shows the results in a truncated scale (from 14 - 28) while the entire scale range is 1-33.



## Conflict of interest

Author T. C. Stiles planned this study, developed the treatment manual, designed the I-CBT 8-week intervention, and reviewed the text. (2) The I-CBT 8-week intervention took place at the Coperio health centre. Coperio has an agreement with the Central Norway Regional Health Authority, a state-owned regional health authority, to deliver rehabilitation services for CFS/ME-patients. For several years, Coperio also had an agreement with the Norwegian Labour and Welfare Administration (NAV) for referral of patients to a project with the aim to get patients rapidly back to work.

Coperio is a commercial company, solely owned by T. C. Stiles. There seems to be a financial conflict of interest in the results of this study which is not reported.

## Outdated and misleading references

The article “Exercise therapy for chronic fatigue syndrome” (reference list no. 21) is not the latest version (5). The latest version has a statement from Cochranes Editor in Chief: “today we are committing to the production of a full update of this Cochrane Review”.

Reference list no. 36: “Cognitive behaviour therapy for chronic fatigue syndrome in adults” (6), also has an editorial note: “ ... the review is no longer current. It should not be used for clinical decision-making.”

US health authorities no longer recommend CBT as treatment for CFS/ME. UK health authorities (NICE) state in the (draft) new guidelines: “Do not offer CBT as a treatment or cure for ME/CFS.”(4) NICE have reviewed 172 CBT outcomes derived from various studies and graded the evidence for 153 (89%) as “VERY LOW” quality, and for the remaining 19 (11%) as “LOW” on quality. Thus, none of these studies are of an acceptable quality.

It is recommended that Frontier conduct a full review of the data to confirm that all results are published and reported accurately.

## References

1. Gotaas ME, Stiles TC, Bjørngaard JH, Borchgrevink PC and Fors EA (2021) Cognitive Behavioral Therapy Improves Physical Function and Fatigue in Mild and Moderate Chronic Fatigue Syndrome: A Consecutive Randomized Controlled Trial of Standard and Short Interventions. *Front. Psychiatry* 12:580924. doi: 10.3389/fpsyt.2021.580924
2. Study protocol
3. Centers for Disease Control and Prevention, Treatment for ME/CFS, <https://www.cdc.gov/me-cfs/treatment/index.html>
4. National Institute for Health and Care Excellence: Myalgic encephalomyelitis (or encephalopathy)/chronic fatigue syndrome: diagnosis and management. In development [GID-NG10091]. [www.nice.org.uk/guidance/indevelopment/gidng10091](http://www.nice.org.uk/guidance/indevelopment/gidng10091)
5. Larun L, Brurberg Kg, Odgaard-Jensen J, Price JR, Price JR. Exercise therapy for chronic fatigue syndrome. *Cochrane Database Syst Rev.* (2016) 1:CD003200. doi: 10.1002/14651858.CD003200.pub6
6. Price JR, Mitchell E, Tidy E, Hunot V. Cognitive behaviour therapy for chronic fatigue syndrome in adults. *Cochrane Database Syst Rev.* (2008) 2008:CD001027. doi: 10.1002/14651858.CD001027.pub2