CBT modules to treat MS-related fatigue
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<th>Possible modules during CBT-treatment¹</th>
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1. **Formulating goals**
   This module applies to all participants. Concrete and obtainable treatment goals are formulated during therapy. Goals comprise activities that the participant wishes to undertake when the fatigue has decreased.

2. **Regulating sleep/wake pattern**
   The importance of a regular sleep/wake rhythm and good sleep hygiene is explained to the patient and instructions are given on how to improve sleep hygiene and the sleep/wake pattern.

3. **Changing beliefs regarding MS**
   Dysfunctional cognitions about MS or the future are identified and challenged, and the participant is supported in forming more helpful beliefs. Problems regarding acceptance of the disease are also addressed.

4. **Changing beliefs regarding fatigue**
   Participants are supported in changing dysfunctional views about fatigue such as a lack of self-efficacy, catastrophizing fatigue and/or strong somatic attributions.

5. **Reduce the focus on fatigue**
   The concept of persistent focusing on fatigue and its consequences are discussed. Participants practise redirecting their attention from fatigue to activities and other sensations. Talking about fatigue is discouraged.

6. **Regulation of physical activity**
   Depending on their level of activity, participants learn how to divide their activities, followed by a systematic increase in regular physical activity to obtain predefined goals.

7. **Regulation of social activity**
   Patients are empowered to expand social activities and deal with problems that can arise during social interaction.

8. **Regulation of mental activity**
   Participants are supported with regards to practising and expanding mental activities such as computer use or reading. Participants learn how to deal with possible cognitive deficits such as concentration or memory problems. During the regulation of physical, social and mental activities, patients also work toward realising their goals.

9. **Addressing the role of the environment**
   Unrealistic expectations related to the environment are addressed and more realistic expectations are promoted. Participants learn how to express their limits and boundaries to ‘significant others’.

10. **Handling pain**
    Dysfunctional cognitions about pain are challenged and replaced by more functional cognitions.

¹ Cognitieve gedragstherapie voor chronische vermoeidheid bij MS patiënten: Behandelprotocol (In English: Cognitive Behavioral Therapy for Chronic fatigue in Patients with MS: Treatment protocol). Hans Knoop and Gijs Bleijenberg, NKCV.