

# NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

## Centre for Clinical Practice

### *Review consultation document*

**Review of Clinical Guideline (CG53) – Chronic fatigue syndrome/ myalgic encephalomyelitis (or encephalopathy): diagnosis and management of chronic fatigue syndrome, myalgic encephalomyelitis (or encephalopathy) in adults and children.**

## **1. Background information**

Guideline issue date: 2007

3 year review: 2010

National Collaborating Centre: National Clinical Guidelines Centre (formally NCC Primary Care)

## **2. Consideration of the evidence**

### **Literature search**

From initial intelligence gathering and a high-level randomised control trial (RCT) search clinical areas were identified to inform the development of clinical questions for focused searches. Through this stage of the process 25 studies were identified relevant to the guideline scope. The identified studies were related to the following clinical areas within the guideline:

- Case definitions of CFS/ME
- Information and support needs of CFS/ME patients, carers and healthcare professionals
- Management of CFS/ME

CG53: CFS/ME, review proposal consultation document

Three clinical questions were developed based on the clinical areas above, qualitative feedback from other NICE departments and the views expressed by the Guideline Development Group, for more focused literature searches. The results of the focused searches are summarised in the table below. All references identified through the initial intelligence gathering, high-level RCT search and the focused searches can be viewed in Appendix I.

<b>Clinical area 1: Case definitions of CFS/ME</b>		
<b>Clinical question</b>	<b>Summary of evidence</b>	<b>Relevance to guideline recommendations</b>
<p>What are the existing case definitions for chronic fatigue syndrome in adults and children and what evidence exists to substantiate or validate these case definitions?</p>	<p>Through the focused search 19 studies relevant to the clinical question were identified.</p> <p>Literature relating to case definitions for CFS/ME generally included observational studies with small sample sizes. Some studies provided a description of symptoms however, no conclusive evidence providing a definitive case definition was identified. Therefore, no new evidence relating to case definitions for CFS/ME was identified which would warrant an update of the current guideline recommendations.</p>	<p>No conclusive evidence was identified that would invalidate current guideline recommendations.</p>

CG53: CFS/ME, review proposal consultation document

<b>Clinical area 2: Information and support needs</b>		
<b>Clinical question</b>	<b>Summary of evidence</b>	<b>Relevance to guideline recommendations</b>
What are the support needs of healthcare professionals, patients and carers?	<p>Eight studies were identified through the focused search relating to this clinical question.</p> <p>In terms of information and support needs of CFS/ME patients, carers and healthcare professionals, most identified studies focused on educational interventions to improve knowledge of CFS/ME among healthcare professionals. Identified evidence included small observational studies which added no new area or contradictory information to current guideline recommendations.</p>	No new evidence was identified which would change the direction of current guideline recommendations.

CG53: CFS/ME, review proposal consultation document

<b>Clinical area 3: Management of CFS/ME</b>		
<b>Clinical question</b>	<b>Summary of evidence</b>	<b>Relevance to guideline recommendations</b>
Does the evidence show that any particular intervention or combination of interventions is effective in treatment, management or rehabilitation of adults and children with a diagnosis of CFS/ME?	<p>Through the focused search 32 studies relevant to the clinical question were identified.</p> <p>Most identified studies were related to interventions for management of CFS/ME. The majority of studies focused on cognitive behavioural therapy (CBT) however, identified studies reported results that were in line with current guideline recommendations.</p> <p>No new evidence was identified specifically related to graded exercise therapy (GET) or pacing. Although the protocol for the PACE trial (an RCT of adaptive pacing, CBT, and graded exercise, as supplements to standardised specialist medical care) was identified, the results of this study were not published at the time of this review (publication date unknown). In addition, a study (FINE trial) of pragmatic rehabilitation, supportive listening and General Practitioner treatment as usual reported inconclusive results.</p>	There is currently no new published evidence that would invalidate current guideline recommendations.

CG53: CFS/ME, review proposal consultation document

	<p>In terms of pharmacological and dietary interventions, new evidence was identified however this was not contradictory to current guideline recommendations.</p> <p>Similarly, evidence related to complementary therapies remains limited in quantity and quality. As such, no evidence was identified which would warrant an update of the guideline recommendations at this time.</p>	
--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Several ongoing clinical trials (publication dates unknown) were identified focusing on the effectiveness of group CBT for patients with CFS/ME; the efficacy of internet-based CBT for adolescents with CFS/ME; behavioural insomnia therapy for CFS/ME and the efficacy of pacing/graded exercise therapy/CBT plus specialist medical care. The results of these trials have not been published at this time but may contribute towards the evidence base relating to management of CFS/ME in the next update review.

No evidence was identified that was relevant to research recommendations in the original guideline.

In conclusion, no identified new evidence contradicts current guideline recommendations.

### **Guideline Development Group and National Collaborating Centre perspective**

A questionnaire was distributed to GDG members and the National Collaborating Centre to consult them on the need for an update of the guideline. Ten responses were received with respondents highlighting the FINE and PACE trials as emerging new evidence (results of the PACE trial have not been published at this time) and new research on therapy (therapy not specified). Conflicting evidence on the association between retrovirus and CFS/ME were also highlighted. However, this is considered outside the remit of the original guideline. No published literature relating to the scope of the guideline was specified through the questionnaire which contradicted current guideline recommendations.

The majority of respondents felt that there is insufficient variation in current practice supported by adequate evidence at this time to warrant an update of the current guideline.

## Implementation and post publication feedback

In total 104 enquiries were received from post-publication feedback, most of which were routine. Key themes emerging from post-publication feedback included enquiries relating to CBT, GET, dietary supplements, complementary therapies and immunoglobulin therapy. This feedback contributed towards the development of clinical question 3 as described above.

No new evidence was identified through post publication enquiries or implementation feedback that would indicate a need to update the guideline.

## Relationship to other NICE guidance

The following NICE guidance is related to CG53:

Guidance	Review date
CG27: Referral for suspected cancer, 2007	Currently scheduled for a consideration for an update (Dec 2010).
CG23: Depression: management of depression in primary and secondary care, 2004	The guideline was updated in 2009 and was published alongside 'Depression in adults with a chronic physical health problem: treatment and management' (NICE clinical guideline 91), which makes recommendations on the identification, treatment and management of depression in adults aged 18 years and older who also have a chronic physical health problem.  Expected review date: TBC.
CG61: Irritable bowel syndrome in adults: Diagnosis and	This guideline was not published at the time of CG53 publication although was alluded to in the guideline.

CG53: CFS/ME, review proposal consultation document



Guidance	Review date
management of irritable bowel syndrome in primary care, 2008	Expected review date March 2011.
TA97: Depression and anxiety - computerised cognitive behavioural therapy (CCBT), 2006	The recommendations in this technology appraisal relating to the treatment of depression have been updated and replaced by recommendations in the two Depression clinical guidelines (CG90 and CG91) published in October 2009.
PH19: Management of long-term sickness and incapacity for work, 2009	This guideline was not published at time of CG53 publication although was alluded to in the guideline.  Expected review date: TBC.

### **Anti-discrimination and equalities considerations**

No evidence was identified to indicate that the guideline scope does not comply with anti-discrimination and equalities legislation. The original scope is inclusive of diagnosis, treatment and management of mild, moderate or severe CFS/ME in children (aged 5 years and upwards, including young people in transition to adulthood) and adults. The guideline covers care in primary and secondary care, and in specialist centres/teams.

### **Conclusion**

Through the process no additional areas were identified which were not covered in the original guideline scope or would indicate a significant change in clinical practice. There are no factors described above which would invalidate or change the direction of current guideline recommendations. The CFS/ME guideline should not be updated at this time.

CG53: CFS/ME, review proposal consultation document

### **3. Review recommendation**

The guideline should not be updated at this time.

The guideline will be reviewed again according to current processes.

Centre for Clinical Practice  
27.10.10

## Appendix I

Adams, D., Wu, T., Yang, X., Tai, S., & Vohra, S. 2009. Traditional Chinese medicinal herbs for the treatment of idiopathic chronic fatigue and chronic fatigue syndrome. *Cochrane Database of Systematic Reviews* (4).

Al-Haggar, M.S., Al-Naggar, Z.A., & Abdel-Salam, M.A. 2006. Biofeedback and cognitive behavioral therapy for Egyptian adolescents suffering from chronic fatigue syndrome. *Journal of Pediatric Neurology*, 4, (3) 161-169.

Berkovitz, S., Ambler, G., & Jenkins, M. 2009. Serum 25-hydroxy vitamin D levels in chronic fatigue syndrome: a retrospective study. *International Journal for Vitamin and Nutrition Research*, 79, (4) 250-254.

Bleijenberg, G. 2008. The effectiveness of cognitive behavioural therapy in groups for patients with Chronic Fatigue Syndrome (CFS): a randomised controlled study. *Controlled-Trials.com* [[www.controlled-trials.com](http://www.controlled-trials.com)].

Bogaerts, K., Hubin, M., Van, D., I, De, P.S., Van, H.B., Van, W.P., Crombez, G., & Van den Bergh, O. 2007. Hyperventilation in patients with chronic fatigue syndrome: The role of coping strategies. *Behaviour Research and Therapy*, 45, (11) 2679-2690.

Brimmer, D.J., McCleary, K.K., Lupton, T.A., Faryna, K.M., Hynes, K., & Reeves, W.C. 2008. A train-the-trainer education and promotion program: chronic fatigue syndrome--a diagnostic and management challenge. *BMC Medical Education*, 8, 49.

Brimmer, D.J., McCleary, K.K., Lupton, T.A., Faryna, K.M., & Reeves, W.C. 2009. Continuing medical education challenges in chronic fatigue syndrome. *BMC Medical Education*, 9, (pp 70).

CG53: CFS/ME, review proposal consultation document

Brown, M.M. & Jason, L.A. 2007. Functioning in individuals with chronic fatigue syndrome: Increased impairment with co-occurring multiple chemical sensitivity and fibromyalgia. *Dynamic Medicine*, 6, 2007.

Carlo-Stella, N. & Cuccia, M. 2009. Demographic and clinical aspects of an Italian patient population with chronic fatigue syndrome. *Reumatismo*, 61, (4) 285-289.

Carney, C. 2008. Behavioral insomnia therapy with Chronic Fatigue Syndrome. *ClinicalTrials.gov* [[www.clinicaltrials.gov](http://www.clinicaltrials.gov)].

Chalder, T., Deary, V., Husain, K., & Walwyn, R. 2010. Family-focused cognitive behaviour therapy versus psycho-education for chronic fatigue syndrome in 11- to 18-year-olds: a randomized controlled treatment trial. *Psychological Medicine*, 40, (8) 1269-1279.

Chambers, D., Bagnall, A.M., Hempel, S., & Forbes, C. 2006. Interventions for the treatment, management and rehabilitation of patients with chronic fatigue syndrome/myalgic encephalomyelitis: an updated systematic review. *J R Soc Med*, 99, (10) 506-520.

Chew-Graham, C.A., Cahill, G., Dowrick, C., Wearden, A., & Peters, S. 2008. Using multiple sources of knowledge to reach clinical understanding of chronic fatigue syndrome. *Annals of Family Medicine*, 6, (4) 340-348.

Ciccone, D.S., Chandler, H.K., & Natelson, B.H. 2010. Illness trajectories in the chronic fatigue syndrome: a longitudinal study of improvers versus non-improvers. *Journal of Nervous & Mental Disease*, 198, (7) 486-493.

Claypoole, K.H., Noonan, C., Mahurin, R.K., Goldberg, J., Erickson, T., & Buchwald, D. 2007. A twin study of cognitive function in chronic fatigue CG53: CFS/ME, review proposal consultation document

syndrome: The effects of sudden illness onset. *Neuropsychology*, 21, (4) 507-513.

Cockshell, S.J. & Mathias, J.L. 2010. Cognitive functioning in chronic fatigue syndrome: A meta-analysis. [References]. *Psychological Medicine: A Journal of Research in Psychiatry and the Allied Sciences*, 40, (8) 1253-1267.

Crawley, E., Hunt, L., & Stallard, P. 2009. Anxiety in children with CFS/ME. [References]. *European Child & Adolescent Psychiatry*, 18, (11) 683-689.

Davenport, T.E., Stevens, S.R., VanNess, M.J., Snell, C.R., & Little, T. 2010. Conceptual model for physical therapist management of chronic fatigue syndrome/myalgic encephalomyelitis. *Physical Therapy*, 90, (4) 602-614.

de Lange, F.P., Koers, A., Kalkman, J.S., Bleijenberg, G., Hagoort, P., van der Meer, J.W., & Toni, I. 2008. Increase in prefrontal cortical volume following cognitive behavioural therapy in patients with chronic fatigue syndrome. *Brain*, 131, (Pt:8) 8-80.

Dinos, S., Khoshaba, B., Ashby, D., White, P.D., Nazroo, J., Wessely, S., & Bhui, K.S. 2009. A systematic review of chronic fatigue, its syndromes and ethnicity: prevalence, severity, co-morbidity and coping. *International Journal of Epidemiology*, 38, (6) 1554-1570.

Edmonds, M., McGuire, H., & Price, J.R. 2004. Exercise therapy for chronic fatigue syndrome. *Cochrane Database of Systematic Reviews: Reviews* (3).

Fukuda, S., Kuratsune, H., Tajima, S., Takashima, S., Yamaguchi, K., Nishizawa, Y., & Watanabe, Y. 2010. Premorbid personality in chronic fatigue syndrome as determined by the Temperament and Character Inventory. *Comprehensive Psychiatry*, 51, (1) 78-85.

CG53: CFS/ME, review proposal consultation document

Fuller-Thomson, E. & Nimigon, J. 2008. Factors associated with depression among individuals with chronic fatigue syndrome: findings from a nationally representative survey. *Family Practice*, 25, (6) 414-422.

Gilje, A.M., Soderlund, A., & Malterud, K. 2008. Obstructions for quality care experienced by patients with chronic fatigue syndrome (CFS)--a case study. *Patient Education & Counselling*, 73, (1) 36-41.

Godfrey, E., Chalder, T., Ridsdale, L., Seed, P., & Ogden, J. 2007. Investigating the 'active ingredients' of cognitive behaviour therapy and counselling for patients with chronic fatigue in primary care: Developing a new process measure to assess treatment fidelity and predict outcome. *British Journal of Clinical Psychology*, 46, (3) 253-272.

Goedendorp, MM., Knoop, H., Schippers, GM., & Bleijenberg, G. 2009. The lifestyle of patients with chronic fatigue syndrome and the effect on fatigue and functional impairments. *Journal of Human Nutrition and Dietetics.*, 22, (3) 226-231.

Hawk, C., Jason, L.A., & Pena, J. 2007. Variables that differentiate chronic fatigue syndrome from depression. *Journal of Human Behavior in the Social Environment*, 16, (3) 1-13.

Heins, M.J., Knoop, H., Prins, J.B., Stulemeijer, M., Van Der Meer, J.W.M., & Bleijenberg, G. 2010. Possible detrimental effects of cognitive behaviour therapy for chronic fatigue syndrome. *Psychotherapy and Psychosomatics*, 79, (4) 249-256.

Hickie, I., Davenport, T., Vernon, S.D., Nisenbaum, R., Reeves, W.C., Hadzi-Pavlovic, D., Lloyd, A., & International Chronic Fatigue Syndrome Study Group 2009. Are chronic fatigue and chronic fatigue syndrome valid clinical CG53: CFS/ME, review proposal consultation document

entities across countries and health-care settings? *Australian & New Zealand Journal of Psychiatry*, 43, (1) 25-35.

Hobday, R.A., Thomas, S., O'Donovan, A., Murphy, M., & Pinching, A.J. 2008. Dietary intervention in chronic fatigue syndrome. *Journal of Human Nutrition & Dietetics*, 21, (2) 141-149.

Houdenove, B.V., Pae, C.-U., & Luyten, P. 2010. Chronic fatigue syndrome: Is there a role for non-antidepressant pharmacotherapy? *Expert Opinion on Pharmacotherapy*, 11, (2) 215-223.

Jason, L., Evans, M., Porter, N., Brown, M., Brown, A., Hunnell, J., Anderson, V., Lerch, A., De Meirleir, K., & Friedberg, F. 2010. The development of a revised Canadian myalgic encephalomyelitis chronic fatigue syndrome case definition. *American Journal of Biochemistry and Biotechnology*, 6, (2) 120-135.

Jason, L., Porter, N., Shelleby, E., Till, L., Bell, D.S., Lapp, C.W., Rowe, K., & De, M.K. 2009. Severe versus Moderate criteria for the new pediatric case definition for ME/CFS. *Child Psychiatry & Human Development*, 40, (4) 609-620.

Jason, L.A., Torres-Harding, S., Friedberg, F., Corradi, K., Njoku, M.G., Donalek, J., Reynolds, N., Brown, M., Weitner, B.B., Rademaker, A., & Papernik, M. 2007. Non-pharmacologic interventions for CFS: A randomized trial. *Journal of Clinical Psychology in Medical Settings*, 14, (4) 275-296.

Jason, L.A., Roesner, N., Porter, N., Parenti, B., Mortensen, J., & Till, L. 2010. Provision of social support to individuals with chronic fatigue syndrome. *Journal of Clinical Psychology*, 66, (3) 249-258.

CG53: CFS/ME, review proposal consultation document

Jason, L.A., Boulton, A., Porter, N.S., Jessen, T., Njoku, M.G., & Friedberg, F. 2010. Classification of myalgic encephalomyelitis/chronic fatigue syndrome by types of fatigue. *Behavioral Medicine*, 36, (1) 24-31.

Javierre, C., Alegre, J., Ventura, J.L., Garcia-Quintana, A., Segura, R., Suarez, A., Morales, A., Comella, A., & De, M.K. 2007. Physiological responses to arm and leg exercise in women patients with chronic fatigue syndrome. *Journal of Chronic Fatigue Syndrome*, 14, (1) 43-53.

Jenkins, M. & Rayman, M. 2005. Nutrient intake is unrelated to nutrient status in patients with chronic fatigue syndrome. *Journal of Nutritional and Environmental Medicine*, 15, (4) 177-189.

Knoop, H., Stulemeijer, M., Prins, J.B., van der Meer, J.W., & Bleijenberg, G. 2007. Is cognitive behaviour therapy for chronic fatigue syndrome also effective for pain symptoms? *Behaviour Research & Therapy*, 45, (9) 2034-2043.

Knoop, H., Prins, J.B., Stulemeijer, M., van der Meer, J.W., & Bleijenberg, G. 2007. The effect of cognitive behaviour therapy for chronic fatigue syndrome on self-reported cognitive impairments and neuropsychological test performance. *Journal of Neurology, Neurosurgery & Psychiatry*, 78, (4) 434-436.

Knoop, H., van der Meer, J.W., & Bleijenberg, G. 2008. Guided self-instructions for people with chronic fatigue syndrome: randomised controlled trial. *British Journal of Psychiatry*, 193, (4) 340-341.

Knoop, H., Stulemeijer, M., de Jong, L.W., Fiselier, T.J., & Bleijenberg, G. 2008. Efficacy of cognitive behavioral therapy for adolescents with chronic



fatigue syndrome: long-term follow-up of a randomized, controlled trial. *Pediatrics*, 121, (3) e619-e625.

Knoop, H., Stulemeijer, M., de Jong, L.W., Fiselier, T.J., & Bleijenberg, G. 2008. Efficacy of cognitive behavioral therapy for adolescents with chronic fatigue syndrome: long-term follow-up of a randomized, controlled trial. *Pediatrics*, 121, (3) e619-e625.

Lu, T.V., Torres-Harding, S.R., & Jason, L.A. 2008. The effectiveness of early educational intervention in improving future physicians' attitudes regarding CFS/FM. *Journal of Chronic Fatigue Syndrome*, 14, (2) 25-30.

Malouff, J.M., Thorsteinsson, E.B., Rooke, S.E., Bhullar, N., & Schutte, N.S. 2008. Efficacy of cognitive behavioral therapy for chronic fatigue syndrome: a meta-analysis. *Clinical Psychology Review*, 28, (5) 736-745.

Matsuda, Y., Matsui, T., Kataoka, K., Fukada, R., Fukuda, S., Kuratsune, H., Tajima, S., Yamaguti, K., Kato, Y.H., & Kiriike, N. 2009. A two-year follow-up study of chronic fatigue syndrome comorbid with psychiatric disorders. *Psychiatry & Clinical Neurosciences*, 63, (3) 365-373.

Meeus, M., Nijs, J., Van, O.J., Van, A., V, & Truijen, S. 2010. Pain physiology education improves pain beliefs in patients with chronic fatigue syndrome compared with pacing and self-management education: a double-blind randomized controlled trial. *Archives of Physical Medicine & Rehabilitation*, 91, (8) 1153-1159.

Neu, D., Mairesse, O., Hoffmann, G., Dris, A., Lambrecht, L.J., Linkowski, P., Verbanck, P., & Le, B.O. 2007. Sleep quality perception in the chronic fatigue syndrome: correlations with sleep efficiency, affective symptoms and intensity of fatigue. *Neuropsychobiology*, 56, (1) 40-46.

CG53: CFS/ME, review proposal consultation document

Newton, J.L., Sheth, A., Shin, J., Pairman, J., Wilton, K., Burt, J.A., & Jones, D.E. 2009. Lower ambulatory blood pressure in chronic fatigue syndrome. *Psychosomatic Medicine*, 71, (3) 361-365.

Nijs, J., Adriaens, J., Schuermans, D., Buyl, R., & Vincken, W. 2008. Breathing retraining in patients with chronic fatigue syndrome: A pilot study. *Physiotherapy Theory and Practice*, 24, (2) 83-94.

O'Dowd, H., Gladwell, P., Rogers, C.A., Hollinghurst, S., & Gregory, A. /1/12. Cognitive behavioural therapy in chronic fatigue syndrome: a randomised controlled trial of an outpatient group programme. *Health Technology Assessment*, 10, (37) iii-iv.

Osoba, T., Pheby, D., Gray, S., & Nacul, L. 2008. The development of an epidemiological definition for myalgic encephalomyelitis/chronic fatigue syndrome. *Journal of Chronic Fatigue Syndrome*, 14, (4) 61-84.

Pae, C.-U., Marks, D.M., Patkar, A.A., Masand, P.S., Luyten, P., & Serretti, A. 2009. Pharmacological treatment of chronic fatigue syndrome: Focusing on the role of antidepressants. *Expert Opinion on Pharmacotherapy*, 10, (10) 1561-1570.

Porter, N.S., Jason, L.A., Boulton, A., Bothne, N., & Coleman, B. 2010. Alternative medical interventions used in the treatment and management of myalgic encephalomyelitis/chronic fatigue syndrome and fibromyalgia. *J Altern.Complement.Med*, 16, (3) 235-249.

Price, J.R., Mitchell, E., Tidy, E., & Hunot, V. 2008. Cognitive behaviour therapy for chronic fatigue syndrome in adults. *Cochrane Database of Systematic Reviews: Reviews* (3).

CG53: CFS/ME, review proposal consultation document

Quarmby, L., Rimes, K.A., Deale, A., Wessely, S., & Chalder, T. 2007. Cognitive-behaviour therapy for chronic fatigue syndrome: comparison of outcomes within and outside the confines of a randomised controlled trial. *Behaviour Research & Therapy*, 45, (6) 1085-1094.

Reid, S.F., Chalder, T., Cleare, A., Hotopf, M., & Wessely, S. 2008. Chronic fatigue syndrome. *Clinical Evidence*, 2008, 2008

Scheeres, K., Wensing, M., Mes, C., & Bleijenberg, G. 2007. The impact of informational interventions about cognitive behavioral therapy for chronic fatigue syndrome on GPs referral behavior. *Patient Education & Counseling*, 68, (1) 29-32.

Stubhaug, B., Lie, S.A., Ursin, H., & Eriksen, H.R. 2008. Cognitive-behavioural therapy v. mirtazapine for chronic fatigue and neurasthenia: randomised placebo-controlled trial. *British Journal of Psychiatry*, 192, (3) 217-223.

Sutcliffe, K., Gray, J., Tan, M.P., Pairman, J., Wilton, K., Parry, S.W., & Newton, J.L. 2010. Home orthostatic training in chronic fatigue syndrome - A randomized, placebo-controlled feasibility study. *European Journal of Clinical Investigation*, 40, (1) 18-24.

The, G.K.H., Bleijenberg, G., & Van Der Meer, J.W.M. 2007. The effect of acclidine in chronic fatigue syndrome: A randomized controlled trial. *PLoS Clinical Trials*, 2, (5).

Togo, F., Natelson, B.H., Cherniack, N.S., FitzGibbons, J., Garcon, C., & Rapoport, D.M. 2008. Sleep structure and sleepiness in chronic fatigue syndrome with or without coexisting fibromyalgia. *Arthritis Research & Therapy*, 10, (3) R56.

CG53: CFS/ME, review proposal consultation document

Van de Putte, E. 2008. Efficacy of web-based cognitive behavioural treatment for adolescents with the Chronic Fatigue Syndrome. *Controlled-Trials.com* [[www.controlled-trials.com](http://www.controlled-trials.com)].

Van, H.E. 2009. The doctor-patient relationship in chronic fatigue syndrome: survey of patient perspectives. *Quality in Primary Care*, 17, (4) 263-270.

Walach, H., Bosch, H., Lewith, G., Naumann, J., Schwarzer, B., Falk, S., Kohls, N., Haraldsson, E., Wiesendanger, H., Nordmann, A., Tomasson, H., Prescott, P., & Bucher, H.C. 2008. Effectiveness of distant healing for patients with chronic fatigue syndrome: A randomised controlled partially blinded trial (EUHEALS). *Psychotherapy and Psychosomatics*, 77, (3) 158-166.

Wang, J.-H., Chai, T.-Q., Lin, G.-H., & Luo, L. 2009. Effect of the intelligent-turtle massage on the physical symptoms and immune functions in patients with chronic fatigue syndrome. *Journal of Traditional Chinese Medicine*, 29, (1) 24-28.

Wearden, A.J., Dowrick, C., Chew-Graham, C., Bentall, R.P., Morriss, R.K., Peters, S., Riste, L., Richardson, G., Lovell, K., Dunn, G., & Fatigue Intervention by Nurses Evaluation (FINE) trial writing group and the FINE trial group 2010. Nurse led, home based self help treatment for patients in primary care with chronic fatigue syndrome: randomised controlled trial. *BMJ*, 340, c1777.

White, P.D., Sharpe, M.C., Chalder, T., DeCesare, J.C., & Walwyn, R. 2007. Protocol for the PACE trial: A randomised controlled trial of adaptive pacing, cognitive behaviour therapy, and graded exercise as supplements to standardised specialist medical care versus standardised specialist medical care alone for patients with the chronic fatigue syndrome/ myalgic

CG53: CFS/ME, review proposal consultation document

encephalomyelitis or encephalopathy. *BMC Neurology*, 7 , 2007. Article Number: 6.

Wiborg, J.F., Knoop, H., Stulemeijer, M., Prins, J.B., & Bleijenberg, G. 2010. How does cognitive behaviour therapy reduce fatigue in patients with chronic fatigue syndrome? The role of physical activity. *Psychological Medicine*, 40, (8) 1281-1287.

Wyller, V.B., Godang, K., Morkrid, L., Saul, J.P., Thaulow, E., & Walloe, L. 2007. Abnormal thermoregulatory responses in adolescents with chronic fatigue syndrome: relation to clinical symptoms. *Pediatrics*, 120, (1) e129-e137.

Yoshiuchi, K., Cook, D.B., Ohashi, K., Kumano, H., Kuboki, T., Yamamoto, Y., & Natelson, B.H. 2007. A real-time assessment of the effect of exercise in chronic fatigue syndrome. *Physiology & Behavior*, 92, (5) 963-968

Zhang, W., Liu, ZS., Wu, T., & Peng, WN. 2006. Acupuncture for chronic fatigue syndrome. *Cochrane Database of Systematic Reviews* (2).